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NATIONAL ENERGY BOARD REASONS FOR DECISION

In the Matter of the Application Under
Part IV of the National Energy Board Act
(Rates Application)
of

TransCanada PipeLines Limited

AUGUST 1980

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NATIONAL ENERGY BOARD

In the Matter of the Application Under
Part IV of the National Energy Board Act
(Rates Application)



Part IV

OF

TRANSCANADA PIPELINES LIMITED

August 1980

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deux langues officielles.



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NATIONAL ENERGY BOARD

IN THE MATTER OF the National Energy Board Act and the Regulations made thereunder, and

IN THE MATTER OF an application by TransCanada PipeLines Limited (hereinafter called "the Applicant") for certain orders respecting rates and tolls under Sections 50 and 53 of the National Energy Board Act and for certain orders under Section 53 of the Petroleum Administration Act, filed with the Board under File No. 1562-T1-13.

Heard at Ottawa, Ontario on 27 and 28 May 1980, and 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 16, 17, 18, 19, 20, and 23 June 1980.

Before:	L.M. Thur	Presiding Member
	J.R. Jenkins	Member
	J.R. Hardie	Member

Appearances:

J.H. Francis)	TransCanada PipeLines
T. Dalglish)	Limited
M.A. Brown)	
J.B. Ballem, Q.C.		Canadian Petroleum Association
C.K. Yates		Independent Petroleum Association of Canada
P. Thompson)	Industrial Gas Users
A.W. Birnie)	Association
Y. Brisson		Gaz Inter-Cité Québec Inc.
M. Peterson		Gaz Métropolitain, inc.
J.D. Brett		Inter-City Gas Company
P.F. Scully		Northern and Central Gas Corporation Limited
J. Griffin		Saskatchewan Power Corporation
J.F. Farrell		The Consumers' Gas Company
A. Mudryj		Union Gas Limited
J. Hopwood, Q.C.		The Alberta Gas Trunk Line Company Ltd.
E.B. McDougall		Trans-Northern Pipe Line Company

(ii)

H.J. Marsland	Westcoast Transmission Company Limited
J.E. Phillips	Consolidated Natural Gas Limited
G. Robichon	Dome Petroleum Limited
J.J. Marshall	Norcen Energy Resources Limited
N.D. Shende	Attorney-General for the Province of Manitoba
J.M. Johnson	Minister of Energy for the Province of Ontario
P. Chartrand	Procureur Général du Québec
A. Biguë) National Energy Board
K.J. MacDonald	

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ABBREVIATIONS AND DEFINITIONS

Board, NEB	- National Energy Board
Consolidated	- Consolidated Natural Gas Limited
CD	- Contract Demand
CDE	- Canadian Exploration and Development Expenses
CPA	- Canadian Petroleum Association
DCF	- Discounted Cash Flow
FDPS	- First Date Placed in Service
Gaz Métro	- Gaz Métropolitain, inc.
GJ	- Gigajoule (10^9 joules)
GPIS	- Gas Plant in Service
Great Lakes	- Great Lakes Gas Transmission Company
IGUA	- Industrial Gas Users Association
Imputed Alberta Border Price	- As defined in the Petroleum Administration Act Natural Gas Prices Regulations
IPAC	- Independent Petroleum Association of Canada
Maple-Lisgar Looping-	That section of TransCanada's pipeline described in "National Energy Board Reasons for Decision In the Matter of an Application Under Part III of the National Energy Board Act of TransCanada PipeLines Limited - February 1980"
MLV	- Mainline Valve
MMBtu	- Million British thermal units
NEB Act	- National Energy Board Act
Northern and Central-	Northern and Central Gas Corporation Limited
PAA	- Petroleum Administration Act
PJ	- Petajoule (10^{15} joules)
ProGas	- ProGas Limited
PS	- Peaking Service

- Saskatchewan Power - Saskatchewan Power Corporation
- Steelman Gas - Steelman Gas Limited
- STS - Storage Transportation Service
- Sulpetro - Sulpetro Limited
- TCPL Resources - TCPL Resources Ltd.
- TransCanada, the Applicant, the Company - TransCanada PipeLines Limited
- TransCanada/
Q & M hearing - Hearing on the applications of TransCanada PipeLines Limited and Q & M Pipe Lines Ltd. which resulted in the "National Energy Board Reasons for Decision In the Matter of the Applications under Part III of the National Energy Board Act of TransCanada PipeLines Limited, Q & M Pipe Lines Ltd. - April 1980."
- TWS - Temporary Winter Service
- Union Gas - Union Gas Limited
- 1976 TransCanada Rate Decision - "National Energy Board Reasons for Decision in the Matter of an Application Under Part IV of the National Energy Board Act of TransCanada PipeLines Limited - December 1976."
- 1978 TransCanada Rate Decision - "National Energy Board Reasons for Decision In the Matter of the Application Under Part IV of the National Energy Board Act (Rates Application) of TransCanada PipeLines Limited - July 1978."
- 1979 TransCanada Rate Decision - "National Energy Board Reasons for Decision In the Matter of the Application Under Part IV of the National Energy Board Act (Rates Application) of TransCanada PipeLines Limited - July 1979."

CHAPTER 1

THE APPLICATION

By an application dated 7 March 1980, TransCanada PipeLines Limited ("the Applicant," "the Company," or "TransCanada") applied to the National Energy Board ("the Board") under Sections 50 and 53 of the National Energy Board Act ("NEB Act") for orders fixing the just and reasonable rates or tolls TransCanada may charge for or in respect of gas sold by it in Canada, for transportation services currently rendered to Saskatchewan Power Corporation ("Saskatchewan Power"), Consolidated Natural Gas Limited ("Consolidated"), and Gaz Métropolitain, inc. ("Gaz Métro"), and for transportation services to be rendered to Consolidated, ProGas Limited ("ProGas"), and Sulpetro Limited ("Sulpetro"), and disallowing any existing tariffs or rates or tolls or portion thereof that are inconsistent with the just and reasonable rates or tolls so fixed, effective 1 August 1980.

In the course of the proceedings, TransCanada was granted leave to amend its application and withdrew its request for orders fixing just and reasonable rates or tolls with respect to transportation services to be rendered to Consolidated, ProGas, and Sulpetro.

The Company also applied under Section 53 of the Petroleum Administration Act ("PAA") and the Regulations

made pursuant to Part III of that Act for Special and General Orders approving the price to be paid by the Applicant to acquire gas for removal from the Province of Alberta and revoking any previous orders inconsistent therewith, effective 1 August 1980.

By Order No. RH-2-80, the Board set down for a public hearing that part of the application made under Part IV of the NEB Act relating to TransCanada's tolls and tariffs. At the opening of the hearing, the Board announced, in that context, that it would hear evidence on the calculation of the imputed Alberta border price, which price represents the cost of gas entering the TransCanada system in the Province of Alberta under the present scheme of natural gas price regulations implemented under the PAA. The Board also announced that the other part of the application dealing with the granting of various orders under Section 53 of the PAA was not a subject matter of the hearing and would be dealt with by the Board as a separate matter at a later time.

The application contained proposed rates based on a cost of service employing a base period of the 12 months ending 30 September 1979 and a test period of the 12 months commencing 1 August 1980. Those rates were stated by the Applicant to be based solely upon experienced and expected increases in the Applicant's costs, including such items as costs of

transportation of gas by others, costs of labour and materials, taxes, and financial costs. In preparing its application, TransCanada employed the existing Toronto reference price for natural gas of \$2.14367 per GJ (\$2.30 per MMBtu) for CD Service at 100 percent load factor. The applied-for cost of service included a rate of return on rate base of 11.55 percent, which is an increase from the rate of return of 10.90 percent authorized by the Board effective 1 August 1979.

The Applicant proposed to modify its rate design for sales of natural gas in Canada to hold constant the present differentials in the CD rates at 100 percent load factor between its various rate zones and applied for an order approving such modification.

As mentioned earlier, the amended application of TransCanada did not include a request for orders fixing the just and reasonable rates or tolls for transportation services to Consolidated, ProGas, and Sulpetro for exports under Licences Nos. GL-61, GL-56, and GL-57. TransCanada proposed that, to the extent that new exports under these Licences could be commenced in the test year without the construction of associated new facilities, these new exports be costed on an incremental basis, with such costs to be recovered pursuant to appropriate pricing orders under the PAA.

TransCanada proposed a procedure by which, if all necessary approvals for new exports and related facilities were received on or before 1 November 1980, the Applicant would file with the Board updated cost of service data which would reflect the cost of service and rate design as approved by the Board for the proposed 1 August 1980 rates, adjusted for the costs and throughput data for new exports based upon latest available information at the date of filing. TransCanada asked that the Board set new rates for the remainder of the test period based upon such updated information, in accordance with its expedited proceedings regulation.

TransCanada also requested in its amended application that the Board make certain additional orders for accounting and rate-making purposes.

The Applicant currently includes in its cost of service a projection of the quantities to be used by it for lost and unaccounted for gas. The Applicant requested that the Board by order provide for an accounting change that would require the Applicant to segregate and record the cost of variances in the actual quantities of lost and unaccounted for gas from those reflected in the rates, and proposed that carrying charges at an annual rate of interest equal to the prime rate plus one percent be added to the balance in the account at the end of each month. It was further proposed

that the balance of accrued variances including interest be amortized from time to time through adjustments in future rates.

TransCanada also stated that it is presently negotiating for the acquisition of storage in Ontario and asked that, in order to recover the costs of such storage not provided for in the Applicant's then effective rates, the Board by order provide that the Applicant defer any such storage costs not provided for in its rates. TransCanada proposed that carrying charges be added to the balance in the account at the end of each month at an annual interest rate equal to the prime rate plus one percent and that the balance of the deferred amount and interest be amortized from time to time through adjustments in future rates.

Finally, the Company requested an order of the Board providing for an accounting change to defer the expected increase in federal income taxes indicated by the introduction, through a Notice of Ways and Means Motion, of a five percent corporate surtax, effective 1 January 1980, from the level of income taxes presently being recovered in its rates with respect to the period 1 January 1980 to 31 July 1980, such balance to be amortized monthly in the test year cost of service.

The hearing commenced in Ottawa on 27 May 1980 and concluded on 23 June 1980. Written interventions in respect

of the application were filed at the hearing on behalf of interested parties, including the Canadian Petroleum Association ("CPA"), the Independent Petroleum Association of Canada ("IPAC"), the Industrial Gas Users Association ("IGUA"), distributors of natural gas, and customers, several pipeline companies, producers and suppliers, the Attorney-General of Manitoba, the Minister of Energy for Ontario, and the Attorney-General of Quebec.

The intervenors provided an expression of views through the interventions filed, through points established during cross-examination of TransCanada's witnesses, or through final argument. CPA, Gaz Métro, and Northern and Central Gas Corporation Limited ("Northern and Central") also adduced evidence. The evidence and the positions of the intervenors were given careful attention and are discussed in appropriate sections of this report.

CHAPTER 2RATE BASE

TransCanada's proposed rate base was submitted as being the average projected utility investment (exclusive of investment in Alberta) for the test period 1 August 1980 to 31 July 1981. The Board has adjusted the rate base for the reasons indicated in this Chapter, as follows:

TABLE IRATE BASE

	(1) <u>Application</u>	(2) <u>Application As Revised</u>	<u>NEB Adjustments</u>	<u>Authorized by NEB</u>
Gross Plant	\$1 887 464 067	\$1 886 114 229	\$(8 579 958)	\$ 1 877 534 271
Accumulated Depreciation	(497 069 579)	(497 034 510)	104 643	(496 929 867)
Contributions in Aid of Construction	<u>(1 908 409)</u>	<u>(1 908 409)</u>	<u>-</u>	<u>(1 908 409)</u>
Net Gas Plant	\$1 388 486 079	\$1 387 171 310	\$(8 475 315)	\$ 1 378 695 995
Working Capital	45 817 879	46 301 203	1 361 781	47 662 984
Average Deferred Income Taxes	(11 229 279)	(12 076 840)	(14 955 578)	(27 032 418)
Other Deferred Costs	<u>2 733 985</u>	<u>2 733 985</u>	<u>-</u>	<u>2 733 985</u>
Total Rate Base	<u>\$1 425 808 664</u>	<u>\$1 424 129 658</u>	<u>\$(22 069 112)</u>	<u>\$ 1 402 060 546</u>

- (1) As amended in the course of the proceedings to exclude a request for Orders fixing the just and reasonable rates or tolls for transportation services to Consolidated, ProGas and Sulpetro for exports and excluding the construction of the associated facilities.
- (2) Incorporates revisions to the amended application made by TransCanada based on matters raised in the course of the hearing.

GROSS PLANT

TransCanada projected its gross plant for the test year to be \$1 886 114 229. The Board has adjusted this to \$1 877 534 271, a reduction of \$8 579 958 representing the weighted average of gross plant additions of \$11 066 343, as shown in Table II, Columns 1 and 2 (Page 2-3).

The NEB adjustments are explained as follows:

(a) Rerating Costs

TransCanada included in its gross plant for the test year some \$5.5 million, which represents costs for pipe replacements between MLV 116 and MLV 127 made under its rerating program. The Applicant also included in gross plant, as part of its rerating program between MLV 116 and MLV 127, an amount of \$150 063 for hydrostatic testing of meter stations, and an amount of \$238 280 for hydrostatic testing of compressor stations.

CPA took the position that the costs of hydrostatic testing and of the pipe replacements associated with TransCanada's rerating program between MLV 116 and MLV 127 should not be included in the Company's rate base until that section of the line was operating at the intended higher pressure.

As in its 1979 TransCanada Rate Decision, the Board considers that the cost of the rerating program should be included in rate base where the evidence shows a reasonable likelihood that the rerated facilities will be brought into service at the higher operating pressure during the test year.

TABLE II

NEB ADJUSTMENT TO TRANSCANADA PLANT ADDITIONS

Description	Gross Plant Additions (unweighted) (1)	Weighted Gross Plant Additions (2)	Test Year Depreciation (3)	Average Accumulated Depreciation (4)
Meter Station Rerating Exh. 83, C.O. 7943 + 7178	\$(150 063)	\$(150 063)	\$(5 252)	\$ 8 222
Comp. Stn. 116 + 119 Rerating Exh. 83, C.O. 7159 + 7190	(238 280)	(238 280)	(8 339)	14 085
Maple Lisgar Looping Exh. 83, Exh. 45, C.O. 8317	(8 794 000)	(6 764 610)	(181 376)	69 760
Class "C" Unapproved Exh. 83, C.O. 8321 to 8346 + 8313 to 8478 + valves MLV 16.2 + 18.2	(1 884 000)	(1 299 462)	(35 801)	12 576
AFUDC		(127 543)		
TOTAL	\$(11 066 343)	\$(8 579 958)	\$(230 768)	\$104 643

However, there was no indication during the hearing that the section of the pipeline between MLV 116 and MLV 127 was likely to be operated at the higher pressure during that period. Accordingly, the Board has deducted from gross plant the amounts of \$150 063 for hydrostatic testing of meter stations and \$238 280 for hydrostatic testing of compressor stations.

With respect to the \$5.5 million cost for pipe replacements, the evidence indicated that these replacements are required under Board Order No. SG-1-78, which relates to pipe replacements associated with population density. The Board is satisfied that these pipe replacements are required for reasons other than rerating, and has, therefore, allowed the \$5.5 million as additions to gross plant.

(b) Maple-Lisgar Looping and Class "C" Additions

TransCanada included \$6 764 610 as the weighted average gross plant addition in the test year for that portion of the proposed Maple-Lisgar Looping that was not certificated by the Board.

In addition, a weighted average gross plant addition of \$1 299 462 for Class "C" items not yet authorized was included.

As in its 1979 TransCanada Rate Decision, the Board considers that additions to plant in service should only be included in the rate base for the test period if those

additions had been approved by the Board under Part III of the NEB Act. Consequently, the Board has disallowed these costs for the test-year additions to gross plant.

(c) Allowance For Funds Used During Construction

The Applicant submitted that it has increased its allowance for funds used during construction from ten and one-half percent to twelve percent effective 1 January 1980 as a result of increases in interest rates for short-term borrowings during the latter part of 1979 and early 1980.

The funds required to finance the construction of facilities may come from various external and internal sources. Since funds cannot be traced, it is difficult to determine the actual source of funds used for financing construction. Because of this difficulty and in order to maintain consistent treatment between funds used during construction and amounts included in rate base, it is the Board's decision that the Applicant's annual rate for AFUDC shall be equivalent to the authorized annual rate of return on rate base.

OTHER MATTERS

(a) FDPS Dates

During the hearing, CPA questioned the accuracy of the FDPS dates used by TransCanada to determine the weighted gross plant additions.

With respect to the FDPS date of the Coberra compressor, the Board is of the opinion that it represents a particular situation and relies on the Applicant's statement

that the matter will be resolved during the test year and that the Coberra compressor will be in service at the planned FDPS date.

The Board is concerned about the accuracy of FDPS dates estimates in general. Accordingly, the Board requires that TransCanada, prior to its next rate application, file with the Board a comparative analysis of the actual FDPS dates of its gross plant additions versus the forecasted FDPS dates presented in its last three rate applications.

(b) Compressors

During the hearing there were several discussions relating to those TransCanada compressor units which will be used mainly as stand-by units. Evidence indicated they will be underutilized because of the installation of compressor units which will be more fuel-efficient.

CPA proposed that because the units faced obsolescence the net plant value of the units be amortized over a period of three to five years.

The Board is satisfied that these units will continue to be "used and useful" in the immediate future, especially with the potential increase in TransCanada's throughput. Therefore, their retirement through amortization is not appropriate at this time.

(c) Aircraft

TransCanada proposed to include in its gross plant 50 percent of the capital cost of its two aircraft, one of which

was acquired in 1973, having a GPIS value of \$2 743 457, and the other in April 1980, having a GPIS value of \$11 700 000.

The Applicant indicated that it proposed this procedure because it was unable, at this time, to estimate the use of each aircraft for its utility. The Company intended to maintain records during 1980 that would enable it to make more accurate estimates in the future.

In the absence of accurate information concerning the respective use of the two aircraft, the Board accepts the inclusion in rate base of the proposed amount relating to the capital costs of the aircraft. However, the Board expects that in future years the Company will keep records delineating the use of the aircraft between utility and non-utility activities and that these records will be used in determining the amount of capital costs for the aircraft that will be included in the rate base.

ACCUMULATED DEPRECIATION

TransCanada projected its average accumulated depreciation for the test year to be \$497 034 510. The Board, having reduced average gross plant by \$8 579 958, has accordingly reduced average accumulated depreciation by \$104 643, as shown in Table II, Column 4 (Page 2-3).

WORKING CAPITAL

Following is a summary of the authorized working capital, as adjusted.

	<u>Application As Revised</u>	<u>NEB Adjustments</u>	<u>Authorized by NEB</u>
Cash	\$ 9 958 039	(\$2 205 538)	\$ 7 752 501
Materials and Supplies	17 446 594	-	17 446 594
Transmission Line Pack	18 384 807	3 567 319	21 952 126
Prepayments and Deposits	<u>511 763</u>	<u>-</u>	<u>511 763</u>
	<u>\$46 301 203</u>	<u>1 361 781</u>	<u>47 662 984</u>

(a) Cash

TransCanada included a 45-day allowance or one-eighth of annual cash operating expenses in its rate base as a cash working capital allowance.

The Applicant indicated that it relied upon the past approvals of this procedure by the Board for the inclusion of the 45-day allowance for cash working capital. The Part V requirements of the schedule to the Board's Rules of Practice and Procedure state that a company applying for orders under Part IV of the NEB Act provide a statement with full details of the calculation of cash working capital for the test year and either a cash time-lag analysis for the year, or any other analysis providing substantive support for the cash working capital requirement. Although the Applicant did not submit a complete time-lag analysis, a preliminary study was filed, indicating a lag of approximately 36 days. This study, however, did not adequately describe the methodology employed in arriving at its conclusions.

The Board considers that, in the absence of evidence to the contrary, many of the payments which would arise in a normal operating month would occur after receipt of the goods or the rendering of service, rather than at the start of a month. A specific example is payroll expenditures, where cheques are issued for wages that have actually been earned in the previous period. The actual lag would depend upon whether employees are paid on a weekly, bi-weekly, or monthly basis. For example, a company which pays salaries on a twice-monthly basis, on the 15th and the 30th of the month, and receives payments for its services on the 20th of the following month would have a lag with respect to payroll calculated as $(35 + 20)/2$ or $27\frac{1}{2}$ days.

Considering that the study submitted in evidence, although preliminary and incomplete, did indicate a lag of approximately 36 days, the Board considers that it is appropriate to include in rate base a cash working capital allowance of one-tenth of the Company's estimate of net operation and maintenance expense for the test year. The negative adjustment to cash of \$2 205 538 reflects a combination of the adjustments in operation and maintenance expense described in Chapter 4 and an adjustment representing the change in the ratio used for calculation of the cash working capital allowance. The adjustment is calculated as follows:

Net Operation and Maintenance Expense (Per Applicant)	\$79 664 312
Reduction in Salaries and Benefits	(2 075 956)
Increase in Allocation of Indirect Expenses	<u>(63 341)</u>
Net Operation and Maintenance Expense (Per NEB)	<u>\$77 525 015</u>
1/10 of Net Operation and Maintenance Expense (Per NEB)	\$ 7 752 501
1/8 of Net Operation and Maintenance Expense (Per Applicant)	<u>9 958 039</u>
NEB Adjustment	<u>\$(2 205 538)</u>

(b) Transmission Line Pack

During the hearing, the Applicant revised the projected average value of transmission line pack to \$18 384 807 during the test year, based on an imputed Alberta border price of 150.253¢/GJ.

The Board has adjusted transmission line pack to reflect the new imputed Alberta border price of 179.408¢/GJ resulting in an increase of \$3 567 319. The derivation of the new imputed Alberta border price is shown in Appendix VII.

AVERAGE DEFERRED INCOME TAXES

The average deferred income tax balance, which is deducted from rate base, will be computed in the following way:

2 x beginning deferred tax balance + deferred taxes for the
test period

As noted in Chapter 4, the Board has determined that the \$15 million reassessment by Revenue Canada, Taxation will be recorded in a deferral account rather than a reduction in the deferred tax account as applied for by TransCanada.

Accordingly, the Board has revised the beginning deferred tax balance upwards from the \$2 750 000 contained in the Company's application to \$17 750 000.

The deferred taxes for the test year will be calculated by multiplying the tax rate by the net of the timing differences employed in computing taxes payable by the Company on the applied-for basis.

These differences are shown below:

	<u>Application As Revised</u>	<u>Per NEB</u>	
Depreciation	\$ 57 089 921	\$ 56 859 153	(1)
Capital Cost Allowance	(89 124 000)	(88 219 560)	(1)
Overhead Capitalized	(5 016 000)	(5 016 000)	
Capital Loss Carried Forward	(745 841)	(745 841)	
Amortization of Debt Discount and Expense	<u>275 000</u>	<u>---</u>	(2)
	<u>\$(37 520 920)</u>	<u>\$(37 122 248)</u>	

(1) Adjusted to reflect Board Decisions in respect of plant items.

(2) The Board believes that the Company has inadvertently made an error in including this item as it was already taken into account in the normalized tax computation. In the Board's view, this amount should be excluded.

Based on all of the foregoing, the average deferred tax balance is computed below:

$$\frac{2 \times (\$17\,750\,000) + (\$37\,122\,248) \times .5001}{2}$$

$$= \frac{\$35\,500\,000 + \$18\,564\,836}{2}$$

$$= \$27\,032\,418$$

CHAPTER 3RATE OF RETURNDEEMED CAPITAL STRUCTURE

In its current application, unlike previous years where exclusive reliance was placed upon the use of actual consolidated capital structures, TransCanada submitted that a deemed capitalization should form the basis for the determination of its rate of return on rate base.

The applied-for capitalization, in conjunction with its individual and overall requested rates of return, is shown below.⁽¹⁾

Deemed Average Capitalization for the
Test Year Ending 31 July 1981

	<u>Amount</u> <u>(\$000)</u>	<u>Ratio</u> <u>%</u>	<u>Cost</u> <u>Rate</u> <u>%</u>	<u>Cost</u> <u>Component</u> <u>%</u>
Debt - Funded	677 440	46.03	8.43	3.88
- Unfunded	<u>229 366</u>	<u>15.59</u>	<u>13.00</u>	<u>2.03</u>
Total Debt Capital	906 806	61.62	9.59	5.91
Preferred Share Capital	85 989	5.84	7.36	.43
Common Equity	<u>478 783</u>	<u>32.54</u>	16.00	<u>5.21</u>
	<u>1 471 578</u>	<u>100.00</u>		<u>11.55</u>

(1) In keeping with the Board's 1979 TransCanada Rate Decision, the Company excluded debt arising from its "take or pay" obligations under its gas purchase contracts.

The evidence presented indicated that the deemed capital structure approach was adopted by TransCanada as a result of the large-scale diversification program it had recently embarked upon. As it recognized that this program involves the financing of investments possessing risk characteristics significantly different from those of its utility business, TransCanada considered that it could no longer employ its consolidated capital structure for rate-making purposes. Rather, it proposed a deemed capital structure which was equal to the sum of its inside- and outside-Alberta rate bases and which possessed debt/equity characteristics essentially consistent with the Company's view of the business risks of its pipeline operations. TransCanada submitted that its approach effectively insulated the ratepayers from the costs of financing its diversification and was, therefore, supportive of its request that an amount of income tax be collected in the cost of service which would have no relation to the income tax effects of its diversification.⁽¹⁾

The Board agrees that the Company's applied-for deemed capital structure serves to insulate the ratepayers from the capital costs associated with its diversification program, and considers it as efficient as might be hoped for by ratepayers in terms of a pre-tax cost of capital. The Board, therefore, approves the use of a deemed capital structure.

(1) See Chapter 4 - Allowable Cost of Service, Income Taxes.

The Board has noted the concerns expressed by intervenors that the ratepayers continue to be insulated from the capital costs of diversification. The onus will be on the Company to demonstrate over time that this objective has been met.

The composition of the applied-for capital structure, together with the various individual cost rates, is discussed below.

FUNDED DEBT

The funded debt component of the deemed capital structure incorporates all of the Company's existing first mortgage pipeline bonds, sinking fund debentures, and subordinated debentures. This debt is of a relatively lower cost, due to its historical nature, and is unassociated with the Company's current diversification program.

The computation of the imbedded cost rate of this debt is shown in Appendix V of this decision. This cost rate has been computed in a manner consistent with that used in the 1979 proceeding and was not at issue in the current hearing. Accordingly, the Board accepts the applied-for cost rate of 8.43 percent.

UNFUNDED DEBT

As mentioned previously, total capitalization is set equal to the total of the Company's inside- and outside-Alberta rate bases. The unfunded debt component of this capital

structure is the difference between the total capital and the aggregate of the funded debt and the preferred and common equity components.

While the term "unfunded debt" normally refers to borrowings of a short-term nature and, therefore, a short-term rather than a long-term cost rate, conflicting indications were given by the Applicant's policy witnesses as to whether this component of capital was of a short- or long-term nature. The Board, for purposes of the present application, accepts that the long-term rate should be applied. CPA noted that, while one of the Company's expert financial witnesses had lowered his estimation of long-term borrowing costs by 75 basis points due to changes in the market since the application was filed, TransCanada had lowered the cost rate applied to unfunded debt by only 50 basis points, from 13.5 percent to 13.0 percent. Based on the evidence of the financial witness, as well as on the fact that the proposed unfunded debt rate was stated by the Company to include an estimated allowance for flotation costs, the Board has decided that a cost rate of 12.75 percent is reasonable.

PREFERRED EQUITY

The Company allocated all of its outstanding preferred share equity to the capital structure deemed to support its pipeline operations. This capital pre-dated the current diversification program, and the applicable cost rate

was calculated in a manner consistent with prior applications. The Board, therefore, accepts the applied-for cost rate of 7.36 percent in the test year.

COMMON EQUITY

(a) Deemed Common Equity Ratio

As mentioned earlier, the stated objective underlying TransCanada's use of a deemed capital structure was to provide an appropriate basis for the determination of a rate of return on rate base assets which would not be affected by the costs of financing the diversification and which, at the same time, would be consistent with the business risks of its pipeline operations.

A key element in this process was the selection of an appropriate common equity ratio. Based upon an analysis of the business risks confronting the pipeline operations, the Company's expert witnesses asserted that an equity ratio in the 30 to 35 percent range was appropriate for the pipeline operations, given the practical constraints imposed by the capital markets. As a matter of judgement, the Company selected the mid-point of that range and applied for a common equity ratio of 32.5 percent.

An expert witness for CPA agreed with this assessment. However, when questioned as to whether it would be inappropriate to select the lower limit rather than the mid-point of the 30 to 35 percent range, the witness expressed the

opinion that such a choice would not have any adverse affects upon the Applicant's access to capital markets. The Applicant did not challenge this position in final argument.

After giving careful consideration to all of the evidence, particularly to the business risks faced by the utility operation, the Board considers that an equity ratio in the lower end of the range is warranted. Accordingly, the Board has decided that it is appropriate to use a deemed common equity ratio of 30 percent.

(b) Rate of Return On Common Equity

TransCanada applied for a rate of return on common equity of 16 percent. Citing the situation prevailing at the time of the 1979 TransCanada Rate Hearing, the Company supported this request by placing primary emphasis on the increased financial risk implicit in the reduced percentage of common equity, together with the increased opportunity costs reflected in its estimates of the earnings rates prospectively available on fixed income securities and the common equity of unregulated industrials during the test period.

The Company's witnesses argued that it would be inappropriate to use a Discounted Cash Flow ("DCF") method to establish the investor's required rate of return on common equity because, among other things, TransCanada is now a

diversified operation and such a method would reflect the cost of common equity capital of the consolidated operation and not just that of the Company's pipeline operations. Accordingly, these witnesses sought to measure the cost of common equity capital primarily through the comparable earnings technique or by reference to the book earnings of groups of non-regulated industrial companies which they felt possessed a level of investment risk similar to that of TransCanada's pipeline operations.

In contrast, CPA's expert witness asserted that the DCF method represented a more appropriate measure of the investor's required rate of return due to, among other things, flaws in the income measurement process which are reflected in the book earnings figures employed in the comparable earnings technique. This witness overcame the shortcoming inherent in the DCF method, where a regulated Company has unregulated activities, by applying this method indirectly to a group of non-regulated industrials selected on the basis of similarity in investment risk. As a result of this process, the witness recommended a rate of return on common equity of 14.25 to 14.75 percent.

The determination of a fair and reasonable rate of return on common equity involves the use of methods which are, of necessity, indirect and subject to the exercise of judgement. Having regard to all of the evidence submitted, the

Board finds 15 percent to be a fair and reasonable rate of return on the deemed common equity.

RATE OF RETURN ON RATE BASE

Based upon its findings in this case, the Board has decided that a return on rate base of 11.10 percent is fair and reasonable. The derivation of this rate of return is given in the deemed capital structure presented below.

	<u>Amount</u> <u>(\$000)</u>	<u>Ratio</u> <u>%</u>	<u>Cost</u> <u>Rate</u> <u>%</u>	<u>Cost</u> <u>Component</u> <u>%</u>
Debt - Funded	677 440	46.46	8.43	3.92
- Unfunded	<u>257 268</u>	<u>17.64</u>	<u>12.75</u>	<u>2.25</u>
Total Debt Capital	934 708	64.10	9.62	6.17
Preferred Share Capital	85 989	5.90	7.36	.43
Common Equity Capital	<u>437 442</u>	<u>30.00</u>	15.00	<u>4.50</u>
	<u>1 458 139</u>	<u>100.00</u>		<u>11.10</u>

NOTE: The above total capitalization reflects both the inside- and outside-Alberta rate bases, as adjusted for the new inputed Alberta border price, as well as other adjustments to the outside-Alberta rate base made by the Board.

CHAPTER 4

ALLOWABLE COST OF SERVICE

TransCanada submitted its estimated cost of service for a test year commencing 1 August 1980 and revised its estimate during the course of the hearing.

A summary of the allowable cost of service for rate-making purposes as authorized by the Board is shown below. Details of Board adjustments to cost of service (excluding return) are provided in this chapter. Details of Board adjustments to rate base and rate of return are provided in Chapters 2 and 3, respectively. Appendix VI shows the functional distribution and classification of the allowable cost of service for rate-making purposes.

<u>Allowable Cost of Service</u>				
<u>Test Year 1 August 1980 to 31 July 1981</u>				
	<u>Application ⁽¹⁾</u>	<u>Application ⁽²⁾</u>	<u>NEB</u>	<u>Authorized</u>
		<u>As Revised</u>	<u>Adjustments</u>	<u>by NEB</u>
Cost of Gas Sold ⁽³⁾	\$1 722 182 144	\$1 725 290 453	\$334 774 302	\$2 060 064 755
Transmission by Others	121 872 531	121 972 510	4 464 459	126 436 969
Operation and Maintenance	163 856 912	163 959 447	1 823 048	165 782 495
Depreciation	57 138 625	57 089 921	(230 768)	56 859 153
Taxes Other than Income Taxes	16 743 871	16 743 871	-	16 743 871
Income Taxes	83 568 918	83 466 933	(16 911 714)	66 555 219
Miscellaneous Deferred Items	603 933	603 933	-	603 933
Other Operating Income	(3 881 222)	(3 881 222)	(406 577)	(4 287 799)
Miscellaneous Revenue	<u>(10 871 343)</u>	<u>(10 087 177)</u>	<u>843 871</u>	<u>(9 243 306)</u>
Total Cost of Service (Excluding Return)	\$2 151 214 369	\$2 155 158 669	\$324 356 621	\$2 479 515 290
Return @ 11.63%	165 821 548			
Return @ 11.55%		164 486 976	(164 486 976)	-
Return @ 11.10%			155 628 721	155 628 721
Net Cost of Service	<u>\$2 317 035 917</u>	<u>\$2 319 645 645</u>	<u>\$315 498 366</u>	<u>\$2 635 144 011</u> ⁽⁴⁾

- Notes: (1) As amended in the course of the proceedings to exclude a request for orders fixing the just and reasonable rates or tolls for transportation services to Consolidated, Progas and Sulpetro for exports and excluding the construction of the associated facilities.
- (2) Incorporates revisions to the application made by TransCanada based on matters raised in the course of the hearing.
- (3) Excludes Export flow-back.
- (4) Equals allowable revenue from rates.

COST OF GAS SOLD

The Board has determined the cost of gas sold for rate-making purposes to be \$2 060 064 755 for the test year, based on an imputed Alberta border price of 179.408¢/GJ, the calculation of which is shown in Appendix VII, and the projected sales volumes for rate-making purposes of 30 644.7 10^6m^3 at 37.47 MJ/ m^3 .

The cost of gas approved for rate-making purposes does not include export flow-back in the test year, the export flow-back being the difference between the Applicant's higher cost for gas acquired in Alberta for export sales, pursuant to an export price order under Section 53 of the PAA, and the imputed Alberta border price.

(a) Metric Conversion

The matter of the conversion of measurements made in the Imperial System to appropriate values in the SI System was raised by Union Gas. Union Gas was concerned with a possible discrepancy in the conversion factors used in converting rates and the conversion factors used in converting measurements. The Board has re-examined the matter and confirms that the procedure used by TransCanada, when converting volumes measured in cubic feet at reference conditions of 14.73 psia and 60°F, is correct; i.e., the factor to use is one cubic foot equals 0.028 327 84 cubic metres at reference conditions of 101.325 kPa and 15°C. However, in accordance with the Gas Inspection Act, when converting heating values measured on a saturated

basis, where 30 inches of mercury is specified as being equivalent to 14.73 psia as a reference condition for the calorimeter, then the appropriate factor to be used is one Btu_{60/61} per cubic foot equals 0.037 887 67 megajoules per cubic metre.

Unfortunately, some confusion has arisen when combining the above factors, which are based on different reference standards, into a number for converting Btu's to joules. In August 1978, the Board published a number for converting rates given in Btu's to rates given in joules. This conversion factor was based on those volumes being converted from reference conditions of 14.73 psia, 60°F and saturated to reference conditions of 101.325 kPa, 15°C and dry-based on a calorimeter setting of 30 inches of mercury being equivalent to 14.7347 psia. This conversion factor should be used only to convert historical data and should not be used to convert actual measurements made after 1 January 1979.

(b) Heat Content of the Gas Stream

Union Gas raised the matter of the forecast value for the heat content of the gas stream for the test year. The Board has reviewed the data submitted by TransCanada and is satisfied that an average value of 37.47 MJ/m³ is a reasonable projection of the heat content for the test year on the TransCanada System.

TRANSMISSION BY OTHERS

TransCanada projected its cost of transmission by others for the test year to be \$121 972 510. The Board has adjusted this to \$126 436 969, as shown in the following summary.

	<u>Application As Revised</u>	<u>NEB Adjustments</u>	<u>Authorized by NEB</u>
Great Lakes:			
(a) Basic Charges	\$161 305 161	-	\$161 305 161
(b) Fuel			
Adjustment	(48 353 750)	\$4 462 790	(43 890 960)
Union Gas	4 052 033	-	4 052 033
Deferral Adjustment	4 864 036	-	4 864 036
Saskatchewan Power	22 680	-	22 680
Steelman Gas	<u>82 350</u>	<u>1 669</u>	<u>84 019</u>
	<u>\$121 972 510</u>	<u>\$4 464 459</u>	<u>\$126 436 969</u>

The adjustments shown in the preceeding summary are explained as follows:

(a) Great Lakes Fuel Adjustment

The existing Federal/Alberta natural gas pricing agreement provides that, for gas that will be consumed in Canada, fuel used in the transmission of gas through the Great Lakes system will be purchased by TransCanada at the imputed Alberta border price. Because such fuel is sold to Great Lakes at the export price, TransCanada receives revenues in excess of the costs allocated to such fuel, amounting to the excess of the export price over the sum of the imputed Alberta border price plus the transmission costs on its system from the

Alberta border to the export point. To offset these excess revenues, an equal amount, referred to as the "Great Lakes Fuel Adjustment", is deducted from transmission by others in the cost of service.

The Board's adjustment of \$4 462 790 for this item is required in order to take into account the net effect of the imputed Alberta border price of 179.408¢/GJ, the transmission costs on TransCanada's system from the Alberta border to the export point at Emerson, Manitoba, and the price of natural gas exported from Canada.

(b) Steelman Gas

The Board's adjustment of \$1 669 to the Applicant's calculation of the test-year transportation costs for gas purchased from Steelman Gas was necessary in order to reflect the approved transportation costs on the Applicant's system.

OPERATION AND MAINTENANCE

Adjustments made by the Board to operation and maintenance expense have resulted in a net increase of \$1 823 048 made up as follows:

	<u>Adjustment</u>
Lost and Unaccounted for Gas	\$(6 125 418)
Compressor Fuel Recovery	84 450
Cost of Gas Used in Operation	14 224 854
Salaries and Employee Benefits	(2 075 956)
Northern Project Advances	(653 983)
Allocation of Indirect Expenses to Non-Utility Functions	(63 341)
Gain on Revaluation of Transmission Line Pack Gas	<u>(3 567 558)</u>
Total Adjustment	<u>\$ 1 823 048</u>

The adjustments shown in the above summary are explained as follows:

(a) Lost and Unaccounted for Gas

TransCanada projected the volume of lost and unaccounted for gas to be $150.6 \times 10^6 \text{ m}^3$ for the test year, which is equivalent to 0.36 percent of the projected test-year measured input to the pipeline system. This lost and unaccounted for gas projection is based on a statistical analysis presented by the Applicant and is equivalent to the average of the unaccounted for losses experienced in the ten-year period from 1970 to 1979.

The Board notes that, subsequent to its 1976 TransCanada Rate Decision, the Company identified and corrected certain causes for the high gas losses incurred in 1976 and previous years. These changes, combined with continuing improvements and diligence by the Company, led to a significant reduction of losses in the last three years, 1977 to 1979. Consequently, the actual lost and unaccounted for gas averaged 0.10 percent for the calendar year 1979, and 0.077 percent in the first nine months of the 1979-80 test year, beginning 1 August 1979.

The Board expects that, by continuing with the present program of improving its metering capability, its metering performance and its metering maintenance practices, the Company should be able to maintain its losses within the levels of the past three years. The Board cannot accept, in a

reasonable projection for the test year, the inclusion of the abnormal losses which occurred prior to 1977, and must give due weight to the changes and improvements that have taken place since that time.

Having regard to the level of losses that have occurred since TransCanada undertook its changes, the Board sees no reason to change last year's allowance in the volume of lost and unaccounted for gas set at 0.1 percent of the test-year measured input. In the Board's judgement, an allowance of this magnitude appears adequate in light of recent experience.

The Board's decision reduces the cost of service as follows.

	<u>10⁶m³</u>	<u>GJ @ 37.47 MJ/m³</u>	<u>Amount at imputed Alberta border price of 150.253¢/GJ</u>
Submitted by the Applicant	150.6	5 642 982	\$8 478 750
As amended by the Board	41.8	1 566 246	<u>\$2 353 332</u>
		Adjustment	<u>\$(6 125 418)</u>

TransCanada also requested approval for a deferral account which would allow it to segregate and record the cost of the variances in the actual quantities of lost and unaccounted for gas from those reflected in rates. The Board notes that this is the fourth successive rate case in which the Company has raised its proposal for a deferral clause for lost and unaccounted for gas. As on the three previous occasions, the Board is not persuaded by the Applicant's arguments. The Board considers lost and unaccounted for gas as being related

to the efficiency of pipeline operations. The results of the Applicant's endeavours to identify and then to reduce its losses, which in large measure it attributes to metering performance, are clear evidence that the Company has considerable technological and managerial ability to continue to identify and to minimize its overall losses. The approval of a deferral account would, in the Board's view, remove an incentive for the Company to continue its efforts to investigate the reasons for its metering problems and to correct them. Accordingly, the Board sees no reason to change its decision of last year and, therefore, denies this request.

(b) Compressor Fuel Recovery

The Board's decision to reduce the volume of lost and unaccounted for gas will cause a reduction in the fuel volumes recovered in respect of T-Service deliveries to Gaz Métro. Accordingly, the Board has adjusted TransCanada's volume for compressor fuel recovery, increasing the cost of service as follows.

	<u>6 3</u> <u>10 m</u>	<u>GJ</u>	<u>Amount at</u> <u>150.253¢/GJ</u>
Submitted by the Applicant	(25.7)	(962 979)	\$(1 446 905)
Amended by the Board	(24.2)	(906 774)	<u>(1 362 455)</u>
Adjustment			<u>\$ 84 450</u>

(c) Cost of Gas Used in Operation

The Applicant's forecast cost of gas used in operation was \$68 528 115, excluding lost and unaccounted for

gas, based on its revised imputed Alberta border price of 150.253 cents per gigajoule.

The Board is satisfied that TransCanada's fuel consumption forecast is reasonable.

The Board has adjusted the following costs to reflect its findings of an imputed Alberta border price of 179.408 cents per gigajoule rather than 150.253 cents per gigajoule.

NEB Adjustments

Cost of Gas Used in Operations including lost and unaccounted for gas and compressor fuel recovery	\$13 770 179
Sales Tax on Compressor Fuel	<u>454 675</u>
Total Adjustment	<u>\$14 224 854</u>

(d) Salaries and Employee Benefits

The Applicant, in its estimate of test-year salaries, provided for an increase of 11.5 percent in 1980 and 10 percent in 1981. These factors were based upon competitive factors in the market place and included two percent for merit increases.

The Applicant also included in its estimate of test-year salaries an amount of \$692 202 for employee reclassifications. TransCanada maintained that the reclassification allowance in the test-period budget did not in fact imply an increase in total payroll from one period to the next, but was necessary because of the basis on which the expenditure estimates were prepared.

It is the view of the Board that the Applicant did not justify that the requested escalation factors of 11.5 percent and 10 percent were appropriate for determining the allowance for salaries. The Board finds that salary escalation factors of 9.5 percent in 1980 and 8.5 percent in 1981 should allow the Company to offer competitive salaries.

The Board notes that TransCanada could have provided additional evidence in support of the numerical value of the reclassification allowance. However, the Board accepts TransCanada's argument that the reclassification allowance does not imply an increase in total payroll in the test year. The Board has adjusted the reclassification allowance to reflect the approved salary escalation factors.

The Applicant projected an increase in the cost of employee benefits due to increases in premiums, staff additions and higher salary levels. No change was projected in the basic benefits programs.

The Board accepts the basis for the calculation of the allowance for employee benefits and has adjusted the allowance to reflect the approved salary escalation factors and staff additions.

Much of the information on staff levels presented at the hearing was difficult to evaluate due, in part, to the use of data from different sources to produce similar statistics, and to lack of clarity in the material itself. After

evaluating the evidence adduced by the Applicant on the justification of its staff level in the test year, the Board concludes that the staff level should be limited, for rate-making purposes, to 1 406 employees by the end of the test year. The resulting adjustment of \$834 318, attributable to the number of employees not authorized, contributes to an overall reduction in salaries and benefits expense of \$2 075 956.

(e) Northern Project Advances

TransCanada proposed to amortize in its cost of service, over a three-year period commencing 1 August 1980, an amount of \$2 638 725, representing advances to the Polar Gas Project between 1 August 1978 and 31 July 1980 exclusive of advances allocated to the Alberta cost of service. Of the total amount of \$3 117 218 advanced during this period, the Applicant submitted that \$76 218 represented application related costs for the two-year period, \$1 442 000 represented non-application related research costs for the period 1 August 1978 to 31 July 1979, and \$1 599 000 represented non-application related research costs for the period 1 August 1979 to 31 July 1980.

The amount estimated for advances to the Polar Gas Project for the period 1 August 1978 to 31 July 1979 was applied for by TransCanada in the 1979 Rate Case and the Board disallowed the amortization of those costs in its decision. The Board sees no reason to change that decision.

Of the \$1 599 000 applicable to 1979-80 advances to the Polar Gas Project, the Board allows the amount of \$676 777, exclusive of \$122 723 for advances allocated to the Alberta cost of service, to be amortized in equal amounts over the next three years beginning 1 September 1980. Accordingly, operation and maintenance expense in the test year is reduced by \$653 983.

In previous decisions, the Board has authorized the amortization in cost of service of amounts totalling \$9 667 000 representing advances by TransCanada to the Polar Gas Project prior to 1 August 1978. Of this amount, \$1 612 817 remained to be amortized as at 1 August 1980. While granting the amortization of current advances of \$676 777, the Board is also of the view that the Polar Gas Project has now progressed to a stage where it is no longer reasonable to expect TransCanada's ratepayers to support additional advances to that project.

This decision does not affect the continued amortization in the test year of advances to Northern Projects approved by the Board in previous rate decisions.

(f) General Expenses

TransCanada included in general expenses an amount of \$500 000 in the test year for Special Services relating to advertising. The Applicant stated that the advertising program would be designed to enhance the opportunities of natural gas to penetrate new markets and to encourage conversion from other fuels to natural gas in markets already served.

The Board accepts that the proposed amount of \$500 000 is reasonable at this time for inclusion in cost of service.

(g) Storage in Ontario

TransCanada requested that the Board permit the deferral of any storage costs in Ontario not provided for in its rates. The Company proposed that carrying charges at an annual rate equal to the prime rate plus one percent be added to the balance in the account at the end of each month and that the balance of the deferred amount including interest be amortized from time to time through adjustments in future rates.

The Company indicated that it has always been able to meet its domestic contractual demand, even when unforeseen incidents had occurred. It also stated that it is not possible to forecast with any accuracy whether or not storage transactions would be undertaken in the test year.

As TransCanada did not base its request on specific storage transactions, the request of the Applicant with respect to the deferral of storage costs in Ontario is denied. This denial does not preclude the Company from applying to the Board for such treatment of costs to be incurred with respect to specific storage transactions.

(h) Allocation of Indirect Expenses to Non-Utility Functions

The Applicant proposed to use a modification of the Massachusetts Formula to allocate its indirect expenses to the

non-utility functions. Under the Massachusetts Formula, indirect expenses are allocated to non-utility functions by using a ratio that is developed by giving equal weight to each of the three factors: labour, revenue, and property. TransCanada considered it appropriate to exclude from the formula the revenue factor since revenue is so largely influenced by the price of gas and since its inclusion would give undue weight to the utility activity.

In proposing this method of calculating estimated non-utility expense, the Applicant did not adduce evidence as to the suitability of this formula to TransCanada's operations. The Company did indicate that it is in the process of divisionalizing its accounting structure and establishing records to substantiate a proper allocation. The Board expects to be informed of the results of these measures as soon as pertinent information becomes available.

In the absence of accurate data as to an appropriate allocation, the Board allows the use of the Massachusetts Formula, including the use of the revenue factor. However, in order to reduce the impact of undue weight of gas prices referred to by the Applicant, the cost of gas sold will be excluded in calculating the utility revenues.

The allocation ratio that is calculated using these factors is 11.16 percent, resulting in an estimated non-utility expense of \$1 473 341. Therefore, operation and maintenance expense has been reduced by \$63 341.

(i) Gain on Revaluation of Transmission Line Pack Gas

TransCanada added to operation and maintenance expense an amount of \$471 630, which represents its estimate of the loss as at 1 August 1980 on the revaluation of transmission line pack gas. This loss was based on TransCanada's estimate of the imputed Alberta border price of 150.253¢/GJ at 1 August 1980.

Having determined the imputed Alberta border price to be 179.408¢/GJ, the Board has adjusted operation and maintenance expense by the amount of (\$3 567 558) to reflect the gain of \$3 095 928 at 1 September 1980.

(j) Carrying Charges on Deferral Accounts

The Applicant requested that a carrying charge on deferral accounts be allowed at a rate equivalent to the chartered bank prime rate plus one percent. During the course of the hearing, no specific evidence was presented which supported this request, other than the fact that this rate has been used in past Board decisions. However, there are two important points which were adduced. These are:

- (1) The actual source of funds used to finance deferrals cannot be traced.
- (2) The Applicant's short-term borrowing rate is at the prime rate.

Since the actual source of funds cannot be traced, it is difficult for the Board to determine whether TransCanada actually finances these deferrals through its lines of credit,

or in the same manner as any other asset (through a combination of debt and equity). It is also noted that, once a deferral is permitted to be amortized through cost of service and becomes part of rate base, it does, in effect, earn the allowed rate of return on rate base. Therefore, the Board has decided that the carrying charge allowed on deferral accounts shall be calculated at the authorized annual rate of return on rate base.

(k) Aircraft Operating Expense

In the absence of accurate information concerning the respective use of the two aircraft, the Board accepts the inclusion in cost of service of the proposed amounts relating to the operating expenses of the aircraft. However, the Board expects that in future years the Company will keep records delineating the use of the aircraft between utility and non-utility activities and that these records will be used in determining the amount of operating expenses for the aircraft that will be included in the cost of service.

DEPRECIATION

Depreciation of fixed assets, as revised, was included in cost of service at rates previously authorized by the Board. The amount projected by the Applicant has been reduced by \$230 768 to reflect the removal by the Board from rate base of various items of gross plant, as shown in Table II, Column 3 (Page 2-3).

INCOME TAXES(a) Normalized Versus Flow-Through Method Of Calculating Income Taxes

Although the Company requested that its tax provision be calculated on a normalized basis consistent with the 1979 and 1978 TransCanada Rate Decisions of this Board, CPA and some other intervenors argued that TransCanada should be ordered to revert to the flow-through method of tax calculation.

The Board notes the position of these intervenors, but does not consider that circumstances have changed from 1978 to an extent which would warrant a return to flow-through taxes.

(b) Equity Method For Calculating Income Taxes

In its current application, the Company included an amount of income taxes which reflected the equity method of computation. The significance of this method is that the income tax provision to be included in the cost of service is essentially based on the common equity return without taking into account interest expense not recovered in the return on rate base or other expenses allocated to non-utility activities and not recovered in the cost of service. In the circumstances of this case, the Board accepts the applied-for method.

(c) Interest On Debt Used to Acquire Non-Utility Property

As a result of financing its diversification program, the Company's total interest expense exceeds the interest component of the return on rate base. The Company has

requested that any interest expense not collected in the cost of service be excluded from the determination of income taxes for rate-making purposes.

This request was a contentious issue in this hearing. On the one hand, intervenors argued that income taxes for rate-making purposes should reflect all or part of the non-collected interest expense because TransCanada has no sources of taxable income other than its pipeline operation which might be reduced by the application of this interest expense; that the credit capacity of TransCanada's pipeline operation had formed the basis upon which the diversification program was financed; that the diversification might affect the Company's credit rating or financing costs in a negative way; and that past Board decisions have reflected all or part of similar interest expenses in the computation of income taxes for rate-making purposes.

The Applicant, on the other hand, argued that the non-collected interest costs were not borne by the ratepayers and, therefore, the ratepayers are not entitled to the benefit of the tax deduction associated with this interest; that the shielding of the shareholders' income by this interest expense was in keeping with provisions of the Income Tax Act designed to encourage equity investment by Canadian corporations in other Canadian corporations; that the credit capacity of the pipeline operation rested ultimately with the capital invested and reinvested by the Company's shareholders; that to compute

the income taxes for rate-making purposes on a basis other than the one applied for could only benefit the ratepayers and have a negative impact on the shareholders; and that the calculation of income taxes for rate-making purposes on the basis requested would place the ratepayers in exactly the same position as they would have been had no diversification taken place.

Having regard to all of the evidence presented, and particularly to the deemed capitalization, which includes a 30 percent common equity ratio, the Board has decided that the computation of income taxes for rate-making purposes should not include interest expense that is not recovered in the approved return on rate base.

(d) Renounced Canadian Exploration and Development Expenses

Another tax consequence of diversification is related to the CDEs renounced by TCPL Resources and assigned to TransCanada under Section 66 (10.1) and (10.2) of the Income Tax Act. It was acknowledged that these expenses were assigned to TransCanada in order that they might be used at an earlier time than if they were retained by TCPL Resources.

The Company has requested that the CDEs be excluded from the determination of income taxes for rate-making purposes. Having in mind that much the same line of argument applies to these expenses as to the interest expense referred to above, it is the Board's view that, in order to avoid an undue penalty to TransCanada's shareholders, the computation of income taxes for rate-making purposes should exclude CDEs.

(e) \$15 Million Income Tax Reassessment

TransCanada stated that its income taxes were being reassessed by Revenue Canada, Taxation, resulting in an expected increase of approximately \$15 million. This reassessment relates to the years 1956 to 1977. While TransCanada intends to appeal this matter, it must first pay the reassessment. The Company has applied in these proceedings to deduct this amount from the deferred tax balance until the reassessment is resolved.

Because this reassessment relates to a period when the Company was computing its taxes under the flow-through method, it is the Board's view that a more appropriate treatment of this reassessment is to record it in a deferral account at the time of payment. The deferral account will bear carrying charges calculated at the authorized rate of return on rate base. Disposal of the balance will be considered at the time of the Company's next rate hearing. Also, should any amount be refunded on appeal prior to the next hearing, the amount of the refund including interest is to be credited to the deferral account pending final disposition by the Board.

(f) Income Tax Rate and Deferral Account In Respect of the Five Percent Corporate Surtax

Recently, the Federal Government announced its intention, by a Notice of Ways and Means Motion, to impose a temporary five percent surtax on the Federal Part I tax payable by corporations, effective for the two-year period 1 January 1980 to 31 December 1981.

As discussed previously, the Company submitted in its application that the income tax provision of cost of service be calculated disregarding both interest expense not recovered in the return on rate base and the CDEs renounced by TCPL Resources. While disregarding these expenses deems TransCanada to be in a substantial tax-paying position, the evidence indicated that the actual case will be quite different.

Accordingly, in order to avoid an undue penalty to the ratepayer, the Board denies the Company's request that the income tax provision be calculated with reference to a tax rate which reflects the temporary corporate surtax. The Board has decided that the computation of taxes for rate-making purposes will be at the 50.01 percent rate, which excludes the surtax.

The Company also applied for a deferral account to record the surtax, computed on a stand-alone basis, as it related to the period 1 January 1980 to 1 August 1980. The evidence did not demonstrate that any surtax would be paid by TransCanada with respect to the period 1 January 1980 to 1 August 1980. The request for a deferral account is, therefore, denied.

(g) Summary

The Board's findings in respect of income tax matters are reflected in the income tax calculation given below. This computation incorporates the Board's decisions in respect of the rate base and rate of return areas.

NORMALIZED INCOME TAXES FOR THE TEST YEAR

	<u>Application as Revised</u>	<u>Per NEB</u>
Operating Income	<u>\$164 486 975</u>	<u>\$155 628 721</u>
Equity Component of Operating Income	\$ 80 178 500	\$ 69 121 585
Permanent Differences:		
Eligible Capital Expenditures	(114 111)	(113 377)(1)
Non Allowable Amortization of Debt Discount and Expense	(2 960 378)	(2 941 354)(1)
Capital Gains	1 066 236	1 059 385 (1)
Inventory Allowance	<u>(535 206)</u>	<u>(597 636)(2)</u>
Normalized Taxable Income	<u>\$ 77 635 041</u>	<u>\$ 66 528 603</u>
Income Taxes Thereon (at 51.81%) (at 50.01%)	<u>\$ 83 466 933</u>	<u>\$66 555 219</u>

OTHER OPERATING INCOME

The Board's adjustment of \$(406 577) to the Applicant's calculation of other operating income for the test year was necessary in order to reflect increased revenue from the sale of delivery pressure arising from the change in the imputed Alberta border price.

MISCELLANEOUS REVENUE

TransCanada credited its cost of service with miscellaneous revenue amounting to \$10 087 177. This amount

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- (1) Difference due to a minor change in the Alberta allocation factor applied arising from Board adjustments to the rate base.
- (2) Difference due to increase in the imputed Alberta border price.

included revenue from the sale of Peaking Service, Temporary Winter Service, and Storage Transportation Service at the rates proposed by TransCanada. In view of the Board's decision on Peaking Service, Temporary Winter Service, and Storage Transportation Service rates (see page 5-5), and considering the change in the imputed Alberta border price, the Board has determined that the amount of miscellaneous revenue to be credited to the cost of service in the test year shall be \$9 243 306.

CHAPTER 5

RATE DESIGN AND OTHER TARIFF MATTERS

CONSTANT ZONE DIFFERENTIALS

The principal issue in respect of rate design in this hearing was the proposal by TransCanada to modify its rate design for sales of gas in Canada by maintaining the present differentials in the CD rates at 100 percent load factor between the various rate zones.

Under the existing Federal/Alberta agreement, the cost of gas transmission to the Eastern Zone is deducted from the Toronto reference price to determine the imputed Alberta border price. After the imputed Alberta border price has been determined, the transportation rates are designed using the principles approved by Board Order No. TG-1-73. When there is an increase in the cost of transmission, the increase in the costs allocated to the Eastern Zone results in a proportionate decrease in the imputed Alberta border price. However, since transmission costs are allocated on a distance basis, the costs allocated to the zones west of the Eastern Zone do not increase as much as the costs allocated to the Eastern Zone. The net effect is that, in the upstream zones, the average CD rates at 100 percent load factor decrease, since the increase in the transportation rates is more than offset by the decrease in the imputed Alberta border price.

TransCanada referred to this effect as an anomaly and proposed that this anomaly be eliminated by increasing the allocated transportation costs to those zones upstream of the Eastern Zone and reducing the costs normally allocated to the Eastern Zone to the level required to keep the price differentials between the zones at the present level. This would result in an increase in the imputed Alberta border price.

The proposal by TransCanada was examined thoroughly during the course of the hearing. Some intervenors objected to the proposal since they felt it resulted in non-cost based rates. They believed the shifting of costs from the Eastern Zone to the upstream zones in order to produce desired rates violated the principles of cost allocation approved by the Board in the first TransCanada rate case.

Also, some intervenors felt that there was in fact no anomaly since it is merely the expected result when the presently approved method of cost allocation is coupled with commodity-pricing in the market place and the Federal/Alberta agreement.

In its 1979 TransCanada Rate Decision, as a result of a motion by Gaz Métro that TransCanada be directed to study allocation of costs using, among others, the method of using historical zone differential, the Board stated:

Further, the Board sees no merit in using the historical zone differentials, since those differentials reflect nothing more than the differences in rates between various zones arising from the allocation of costs to the various forecast deliveries in a particular test period. In the Board's view, the deliveries to a zone in a particular test period do not provide an appropriate guide for determining rates for that zone in another period."

The Board believes TransCanada has not demonstrated that any significant change in circumstances has occurred which would cause the Board to change the view it expressed last year with respect to the use of historical zone differentials.

Furthermore, it is the Board's view that the method of rate design proposed by TransCanada does not produce cost-based rates since the shift of costs from the Eastern Zone to the upstream zones has the effect of distorting the distance factor used in the allocation of costs.

The Board agrees that there is no anomaly in the present rate design. The fact that the decrease in the imputed Alberta border price is more than the increase in the transportation rates in the zones upstream of the Eastern Zone is an expected result under the present system of commodity net-back pricing. The transportation rates are still designed using the well-tested principles established by the Board in the first TransCanada rate case.

In the Board's view, the reallocation of costs to produce desired rates does not achieve a more appropriate rate

design in the circumstances of the present application.

Therefore, the proposal by TransCanada is denied.

ALLOCATION OF LOST AND UNACCOUNTED FOR GAS

In its application, TransCanada allocated the cost of lost and unaccounted for gas on a commodity-kilometre basis. During the hearing, TransCanada proposed that the method of allocation be changed to a commodity basis.

The Board is satisfied that the evidence presented at this time is consistent with the assertion by TransCanada that the amount of lost gas included in the total of lost and unaccounted for gas is negligible and that unaccounted for gas arises from metering inaccuracies, thus eliminating distance of haul as a factor in the quantity of lost and unaccounted for gas. The Board recognizes that the commodity method of allocation proposed by TransCanada does not allow for an exact allocation for either a bias in metering uncertainties or actual losses that may occur. However, the Board concludes that, based on the evidence presented in this application, it is more appropriate to allocate the cost of lost and unaccounted for gas on a commodity basis.

ACQ DIFFERENTIAL

In its application, TransCanada proposed an ACQ rate differential of \$2.70/10³ m³, based on what it would cost the Company to provide the storage and transportation services in Ontario necessary to sell, as CD service, the 5 580 10⁶ m³ of ACQ service gas. Subsequently, an updated calculation of the ACQ differential was filed to reflect new storage and transportation rates approved by the Ontario Energy

Board, but these new rates did not result in any significant change to the calculation of the ACQ differential.

One intervenor proposed changes in the method of calculating the differential, but, based on the evidence presented, it is the Board's view that the changes are not justified.

Accordingly, considering the rate of return allowed in this decision, the Board finds a differential of \$2.80/10³m³ to be appropriate.

The Applicant proposed that, at the time a change is made in the Toronto reference price, the ACQ rate differential be recalculated to reflect the components included in the calculation in effect at that time. One intervenor submitted that the ACQ rate differential should be recalculated whenever the Applicant's CD service rates change, whether as a result of an increase in the Toronto reference price or otherwise. In this regard, the Board notes that the Applicant and interested parties both have the right to apply to the Board for a change in the ACQ rate differential if they consider such a change to be appropriate.

STS, PS AND TWS RATES

During the hearing, the Applicant filed an exhibit outlining the method by which the proposed STS, PS and TWS

rates were derived, based on transportation and storage costs in Ontario. Subsequently, a second exhibit was filed which revised the proposed rates to reflect updated Tecumseh storage rates.

The intervenors that purchase these services questioned the principles used by TransCanada in developing the proposed cost-based rates.

It is the view of the Board that insufficient evidence was advanced during the hearing to justify a change at this time to the cost-based rates as proposed by TransCanada.

The Board, therefore, directs that the existing STS rates be maintained and that the existing domestic PS and TWS rates, adjusted to reflect the change in the imputed Alberta border price, be maintained.

GENERAL TERMS AND CONDITIONS

TransCanada proposed a change in the General Terms and Conditions of its Tariff. Section VIII of the General Terms and Conditions currently contains a reference to "arbitration decision" in sub-section 2, Remedies for non-payment. TransCanada proposed to delete this reference in order to correct a minor administrative error.

The Board finds the proposed change to Section VIII of the General Terms and Conditions of the Tariff to be appropriate.

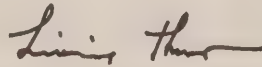
OTHER TARIFF MATTERS

To the extent that new exports by Consolidated, ProGas, and Sulpetro, under Licences Nos. GL-61, GL-56, and GL-57, can be commenced in the test year without the construction of associated new facilities, TransCanada proposed that these new exports be costed on an incremental basis, such costs to be recovered pursuant to appropriate pricing orders under the PAA. The Board will decide whether this proposed course of action should be followed at the time an application regarding this matter is filed.

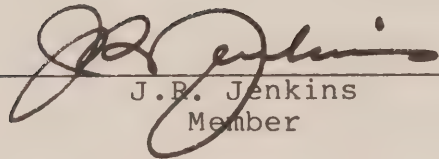
TransCanada stated that, if all necessary approvals for new exports and related facilities were received on or before 1 November 1980, it would file with the Board updated cost of service data which would reflect the cost of service and rate design as approved by the Board for the proposed 1 August 1980 rates, adjusted for the costs and throughput data for new exports based upon the latest available information at the date of filing. TransCanada requested approval in principle for the Board to set new rates for the remainder of the test period based upon such updated information, in accordance with its expedited proceedings regulation. Until the application is made, the Board is not prepared to decide on whether the expedited proceedings regulation will be appropriate for disposing of this matter. Accordingly, the request of TransCanada is denied.

DISPOSITION

Order Nos. TG-4-80 and TG-5-80, which are shown as Appendices II and III, respectively, are predicated upon these Reasons for Decision. The foregoing chapters, together with the above orders, constitute our Reasons for Decision and our decision on the application by TransCanada PipeLines Limited.



L.M. Thur
Presiding Member



J.B. Jenkins
Member

Ottawa, Canada
August, 1980

DISSENTING OPINION OFMR. J.R. HARDIE

I was fully involved in arriving at the decisions in all matters in this case and I agree with the findings and conclusions of my colleagues on the application of TransCanada, except as to the computation of Income Taxes.

INCOME TAXESHistory of Treatment for TransCanada

From its inception and for several years, TransCanada was not directly regulated by the Board, although its tolls and tariffs were filed with the Board and generally monitored by the Board. During this period, TransCanada chose to calculate its tolls on the basis of flow-through income tax. In fact, no income taxes were paid in this period and none were included in calculating the tolls that were charged by TransCanada. When the pipeline was first directly regulated by the Board, the flow-through basis for income taxes was continued. However, no taxes were actually paid and, therefore, no amount was included in the cost of service for income tax for the years up to 1978.

The method of calculating income tax was a major issue in the 1975 TransCanada Rate Hearing, but the Board saw no reason to change its previous decisions and TransCanada was directed to continue to calculate income taxes on a flow-through basis.

The matter was again raised by TransCanada in the 1978 Rate Hearing and, at that time, the Board considered it appropriate to allow TransCanada to calculate its tax on a normalized basis. The 1978 TransCanada Rate Decision in that case indicated there were three main reasons for the change.

1. The Board considered that, since normalized tax spread the incidence of future tax more evenly over the remaining life of the pipeline, greater equity would be achieved between the various users over the remaining life if depreciation and income taxes were reflected in the tolls on the same basis.
2. The Board recognized the argument raised by CPA that the inclusion of normalized taxes would reduce the funds available to producers for further exploration and development of production. However, the Board considered that, in view of the substantial increases in the flow-back to the producers resulting from higher gas prices, the change to normalized taxes would not be a significant disincentive to continued exploration and development.
3. The final reason, and perhaps the major reason for the change, was the fact that it was realized that natural gas developments would play an important role in helping the country achieve self-reliance in relation to energy, and that such developments should include the whole natural gas system, from exploration, development and production to

transmission and distribution. It was felt that it was necessary that transmission companies too have ready access to capital markets and that switching TransCanada to normalized income taxes would assist TransCanada in this regard.

In the 1979 Rate Hearing, the matter of TransCanada reverting to flow-through was raised again by CPA. However, in its decision, the Board found that, because no arguments were raised that had not been considered in its previous decision, and as there were no significant changes in circumstances since 1978, TransCanada should continue to use the normalized method to calculate the income taxes to be included in cost of service.

Reversion to Flow-Through

It is now apparent that circumstances have changed considerably from those that were considered in the 1978 TransCanada Rate Decision.

With regard to reasons therein stated, the following appear pertinent.

With respect to TransCanada's access to financial capital markets at reasonable rates, the situation is changed from that which was perceived in the 1978 decision. TransCanada has now embarked upon a major program of diversification.

TransCanada has already raised funds in the capital market for this purpose and made commitments for further

investment in enterprises other than its Canadian pipeline operations. Under these circumstances it appears that the Company has full confidence, which was supported by evidence of its financial advisors at the hearing, that it would have no problem in raising funds for these purposes, and that such fund raising would not have an adverse effect on the bond rating of the Company. While it can be assumed that this assessment was based on the expected continuation of TransCanada being able to utilize normalized tax in its cost of service, there was no indication that it would be unable to raise the funds necessary for its utility operations if the tax treatment were changed. From the evidence presented, it is apparent that TransCanada does not contemplate any difficulty in providing the necessary financing for any foreseeable required expansion of its pipeline in Canada.

With regard to the funds available to producers, the situation has also changed. While the producers are receiving a greater net-back than they received in 1978, their costs of finding and producing new gas reserves have also risen. In order to reduce Canada's dependence on imported foreign oil, it is essential that such exploration and development continue. At the present time, there is no certainty that the pricing regime established under the PAA will continue in its present form. However, whether future prices are set at the Toronto city-gate or at the Alberta border, it would be in the best

interests of both the producing industry and Canadian consumers of natural gas to have a maximum return to producers and a minimum price to distributors. This can be accomplished only by keeping the transportation tolls as low as can reasonably be accomplished while, at the same time, being fair to TransCanada. The use of flow-through income taxes at this time would provide lower tolls than those established using a normalized tax calculation.

CPA referred to evidence presented in the recent TransCanada/Q & M hearing that the penetration of gas into the new market areas to be served by the applied-for facilities would require subsidization. CPA pointed out that a reduction in TransCanada's tolls through reverting to flow-through taxes would reduce the amount of subsidization required. TransCanada, in its motion for an order to reject CPA's evidence, argued that it was premature to consider this, since the facilities to serve the expanded markets would not be in place during the test year. While the fact that a subsidy would be provided to assist in expanding natural gas markets has not been established, and that the form or amount of such subsidy, if any, cannot be determined at this time, it would be appropriate to set transportation costs at as low a level as reasonably possible so that gas would be delivered to such additional markets at the lowest possible price. Even with respect to present markets, in a time of rapidly rising energy costs, it would be appropriate to minimize the delivery cost of energy to the consumer.

In this connection, it should be noted that, at the time that TransCanada was establishing its original market for natural gas in Eastern Canada, it chose to utilize the flow-through method of tax calculation.

Another matter that is relevant to the determination of the amount of income tax to be included in the cost of service is the time at which TransCanada would pay the income tax to the taxing authorities.

In the period from its inception to 1978, TransCanada's claim for capital cost allowance used in filing its tax return was sufficiently in excess of the amount of depreciation written in the books that no tax was payable by the Company. In the 1978 Rate Hearing it was indicated that tax would be payable for 1978 although the claim for capital cost allowance still exceeded the booked depreciation.

In its 1978 TransCanada Rate Decision, the Board stated, "Several potential major new investments were identified, but in the prevailing circumstances no forecast of future outlays could be relied on with any degree of certainty."

At the present hearing, TransCanada, in reply to a request from CPA, filed a schedule of the comparison of the depreciation to be charged in the rates and the amount of capital cost allowance that could be claimed for tax purposes. This indicated that cross-over would occur about 1987. It was admitted in cross-examination that this forecast was based on

minimum capital requirements. During the recent TransCanada/Q & M hearing, in evidence which deals with increasing exports and expansion of Canadian markets east of Montreal, and which was referred to by CPA and others in this hearing, TransCanada has indicated that the total capital expenditures that would be necessary to provide the required additional facilities would amount to over one billion dollars. Any reasonable assumption on the timing of such expenditures added to the minimum capital projection submitted by TransCanada referred to above would indicate that cross-over would not occur at least until the early 1990s. Normalized taxes would, therefore, exceed taxes actually payable in each year until that time. Even when cross-over does occur, it would be several years later before the deferred taxes collected previously in the rates on the normalized basis would all be paid to the governments concerned, and the deferred tax balance reduced to zero. Any new projects or inflation that would increase the amount of capital expenditures, including the normal replacement of present facilities, would defer the final payment date well into the next century.

Under these circumstances, it is apparent that the additional income taxes, represented by the difference between normalized and flow-through taxes, that would be included in the rates if the company were to continue on a normalized tax basis, would not be payable by the company for at least 12 to 15 years.

It is also apparent that substantial amounts of such additional taxes would not be payable for some years thereafter. The inclusion of tax on a normalized basis means that, to the extent that normalized tax exceeds tax calculated on the flow-through basis, there would be included in the cost of service taxes which would in fact not be payable by TransCanada for a period of some 15 to 20 years.

The real effect of including taxes on a normalized basis is to force those parties who effectively pay the transportation tolls of TransCanada to supply TransCanada with cash which it does not immediately require to pay its expenses. Since TransCanada is now engaged in diversified operations in addition to its regulated pipeline, there is no guarantee that such funds would be utilized for its pipeline activities.

For all of the above reasons, the inclusion of normalized taxes in the cost of service is, therefore, in my opinion, not warranted. In addition, the views which I express below in connection with the method of calculating flow-through taxes constitute additional reasons to support my conclusion that TransCanada should not be permitted to include normalized taxes in its cost of service. I therefore consider that TransCanada should only include in its cost of service taxes calculated on a flow-through basis.

Calculation of Flow-Through Taxes

In filing its application, TransCanada submitted that its income taxes should be calculated on the premise that its utility operation be considered on a "stand-alone" basis. By a stand-alone basis, TransCanada meant that it wished the utility to be considered as if it were a separate corporation that had no operations other than the operation of the pipeline. TransCanada adduced considerable evidence in support of this position.

TransCanada maintained that, because the utility operation should be considered on a stand-alone basis, the only amounts which should be deducted from its gross utility income to arrive at taxable income on which the income tax should be calculated were those items of expense which were incurred by the utility itself. Any expenses that were not considered applicable to the utility operation were to be ignored in calculating the amount of the taxes to be allowed in the cost of service of the utility. A review of the Applicant's evidence on this matter is contained in Chapter 4 (Pages 4-17 to 4-22).

TransCanada's position is that the income tax to be allowed in the cost of service should be calculated as if the utility were a separate company and itself paid income tax. However, this is not and cannot be the actual condition. TransCanada's utility operation does not pay income tax. The income tax is paid by TransCanada PipeLines Limited. The amount of tax that should, therefore, be included as an expense in the

cost of service of the utility should be that part of the total tax paid or payable by TransCanada PipeLines Limited that is reasonably attributable to income earned by the utility operation.

Rather than considering the utility operation on a stand-alone basis, it would be more appropriate to consider TransCanada's total operation on a departmentalized basis. On this basis TransCanada PipeLines Limited would be considered as a whole and its total operations divided into utility and non-utility sections. Expenses which would apply to the utility would thus be a legitimate portion of the total expenses of the total company which were reasonably attributable to the utility operation.

There are two categories of deductions which were contentious issues in the hearing. These are the treatment of non-utility expenses and the appropriation to the utility of CDEs which had been renounced by TCPL Resources and assigned to TransCanada. During the course of the hearing, certain non-utility expenses were identified. These consisted of interest paid on debt which was borrowed to make investments in non-utility enterprises, amounts of administrative and general expenses which were allocated to non-utility operations using a modified Massachusetts Formula, and expenses of overhaul and operating expenses of the two aircraft in excess of those included in cost of service.

Since it is only TransCanada PipeLines Limited that pays tax and the utility does not pay any tax in itself, it is legitimate that the amount of tax that should be included in the cost of service of the utility should be only that proportion of the total tax payable by TransCanada PipeLines Limited that is applicable to the utility operation. The stand-alone basis proposed by TransCanada assumes the fiction that the utility pays income tax. If it did, its tax would be calculated as proposed by the Applicant. However, it is TransCanada PipeLines Limited that pays the tax, and the total amount it pays will be less than that calculated on the basis of the utility standing alone.

In filing its tax return, TransCanada PipeLines Limited will include its taxable income from the utility operations as well as from other sources. However, it will not include dividends from its subsidiaries, since intercompany dividends are not taxable in Canada. It will then deduct all its expenses, including the interest on debt borrowed to purchase shares of its subsidiaries, and 100 percent of all its operating expenses (not just the proportion allocated to the utility operation). Because it has expenses that are not required to offset income from sources other than its utility operation, the total tax payable will be less than if the only expenses were those included in the cost of service of the utility.

Since it is not legitimate to include in cost of service expenses that will never have to be paid, the amount of

income tax to be included should not exceed the total tax that will be payable by TransCanada PipeLines Limited. The deeming of utility tax expenses which will never in fact be paid is not legitimate.

In the cross-examination of the witnesses who appeared for TransCanada with respect to income tax, it was suggested to them that, since the assets, cash flow, or credit rating that had been generated for TransCanada by reason of its utility operations were used to back the borrowings made to invest in non-utility operations, the utility should be somehow reimbursed for the use of these "off balance sheet assets". The TransCanada witnesses stated that, because the utility had not suffered any loss by reason of the use of these items for non-utility purposes, there was nothing for which the non-utility needed to account to the utility. This same reasoning can be applied to the deduction of, for example, the interest on the debt which was borrowed for investment in TCPL Resources. The only income which TransCanada will receive from TCPL Resources will be by way of dividends. Dividends from other Canadian companies are not taxable in TransCanada PipeLines Limited's hands and, therefore, whether or not that interest is available as a tax deduction does not change the after-tax income which TransCanada will receive from its investment in TCPL Resources. Since the non-utility operation is, therefore, not suffering any loss by reason of the deduction of such interest in calculating the income tax attributable to the utility operations, TransCanada's reasoning

would require that no accounting need be made by the utility operation to the non-utility operation for the use of these tax deductions.

It is appropriate that, to the extent that TransCanada PipeLines Limited has taxable income from its non-utility operations, any expenses which are directly related to the non-utility operations should be deducted in arriving at the taxable income of the non-utility operations. However, to the extent that there are expenses of TransCanada PipeLines Limited which are not required to reduce the taxable income of TransCanada PipeLines Limited's non-utility operations to zero, these should be allowed as deductions in calculating the taxable income of the utility. In this way, the total tax payable by the combined utility and non-utility operations would not exceed the amount of tax which would be payable by TransCanada PipeLines Limited as a whole.

For these reasons, in calculating the income tax to be allowed in the cost of service of the utility operation, deductions will be made for the total amount of interest, administrative and general expenses, and other operating expenses, for the total amount available to TransCanada PipeLines Limited, to the extent that they are not required to reduce the taxable income of the non-utility operations to zero.

With regard to the CDEs, the situation is somewhat different. The availability of this deduction to TransCanada PipeLines Limited was made possible by the stated intention of TCPL Resources to relinquish the use of these deductions in

calculating its own taxable income and allow them to be used by TransCanada PipeLines Limited. This creates a pool of deductions which TransCanada may claim 30 percent per year on a diminishing balance basis. As a result, TransCanada did not pay any tax with respect to its 1979 taxation year.

Since the evidence indicated that no tax will be paid in 1979 or 1980 by TransCanada PipeLines Limited in respect of the income earned by the utility in the test year, no income tax should be included in the cost of service.

It must be understood, however, that the use of CDEs to calculate current taxes may not be a tax saving but may be a tax deferral. In the event that TCPL Resources generates sufficient taxable income in the future to pay income tax, it would not be allowed the deduction of these CDEs that have been relinquished to the parent company. It would then have to pay taxes in the same amount (provided the rates of tax have not changed) as TransCanada has now saved by this deduction. At such time as that situation develops, consideration would have to be given as to whether it would be appropriate to allow, as a legitimate expense in the cost of service, an amount sufficient to reimburse TCPL Resources for the taxes it would then have to pay. Since the Board has no way of monitoring the operations of TCPL Resources, it will rely on TransCanada to bring this to its attention at the time this situation develops.

Other Income Tax Matters

I concur in the decision of my colleagues with respect to the treatment of the \$15 million reassessment and the five percent corporate surtax.

RETURN ON EQUITY

On the basis of the Majority Decision to allow income taxes to be computed on a normalized basis, I concur in the decision to allow a 15 percent return on the equity component of 30 percent of the capitalization.

However, if TransCanada were required to compute its income taxes on a flow-through basis, I consider that the investment risk of the utility would be increased and I would grant a higher equity component in the deemed capital structure to which the 15 percent return on common equity should be applied.

CONCLUSION

For all the above reasons, I must dissent from the decision of my colleagues on the question of the method of calculating the income taxes to be included in TransCanada's cost of service.


J.R. Hardie
Member

Ottawa, Canada
August, 1980

ORDER NO. RH-2-80

IN THE MATTER OF the National Energy Board Act
and the Regulations made thereunder, and

IN THE MATTER OF an application by TransCanada
PipeLines Limited (hereinafter called "the
Applicant") for certain orders respecting
rates and tolls under Sections 50 and 53 of
the National Energy Board Act and for certain
orders under Section 53 of the Petroleum
Administration Act, filed with the Board under
File No. 1562-T1-13.

B E F O R E the Board on Thursday, the 27th day of March 1980.

UPON reading the application filed on behalf of the
Applicant dated the 7th day of March 1980, (hereinafter called
the "application"), firstly, under Sections 50 and 53 of the
National Energy Board Act, for orders fixing the just and
reasonable rates or tolls the Applicant may charge for or in
respect of gas sold by the Applicant in Canada, for
transportation services currently rendered to Saskatchewan Power
Corporation, Consolidated Natural Gas Limited and Gaz
Métropolitain, inc., and for transportation services to be
rendered to Consolidated Natural Gas Limited, ProGas Limited and
Sulpetro Limited and disallowing any existing tariffs or rates or
tolls or portions thereof that are inconsistent with the just and
reasonable rates or tolls so fixed and, secondly, under Section
53 of the Petroleum Administration Act and the Regulations made
pursuant to Part III of that Act, for Special and General Orders

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approving the price to be paid by the Applicant to acquire gas for removal from the Province of Alberta and revoking any previous orders inconsistent therewith, all effective the 1st day of August 1980;

IT IS ORDERED THAT:

1. That portion of the application made under Sections 50 and 53 of the National Energy Board Act will be heard at a public hearing commencing at 9:30 a.m. local time, on Tuesday, the 27th day of May 1980 in the Hearing Room of the National Energy Board, Room 940, Trebla Building, 473 Albert Street, in the City of Ottawa, in the Province of Ontario, (hereinafter referred to as "the Hearing"). The Hearing will be conducted in either of the two official languages and simultaneous interpretation will be provided should a party to the proceedings request such facilities in his intervention.
2. The Applicant shall, forthwith, serve a true copy of the application, if not already served, and a true copy of this Order, upon each person listed in Appendix I of this Order and, as soon as possible, upon such other persons who have intervened pursuant to paragraph 4 hereof.
3. Notice of the Hearing in the form prescribed by the Board as set forth in the Notice attached to and which forms part of this Order shall be published not later than the 8th day of April, 1980 or as soon thereafter as possible, in one issue

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each of "The Herald" in the City of Calgary and "The Journal" in the City of Edmonton, both in the Province of Alberta, "The Leader-Post" in the City of Regina, in the Province of Saskatchewan; "The Winnipeg Free Press" and "The Tribune" in the City of Winnipeg, Province of Manitoba; "The Globe and Mail", "Toronto Star" and "The Financial Post", in the City of Toronto, "The Citizen" and "Le Droit" in the City of Ottawa, all in the Province of Ontario; "The Gazette", "Le Devoir" and "Financial Times of Canada" in the City of Montreal, Province of Quebec, and as soon as may be possible in the Canada Gazette.

4. Any person intending to oppose or intervene in the said application, shall, on or before the 1st day of May 1980 file with the Secretary of the Board thirty (30) copies of a written statement containing his reply or submission, together with any supporting information, particulars or documents, which shall include a concise statement of the facts from which the nature of the respondent's or intervenor's interest in the proceedings may be determined, which may admit or deny any or all of the facts alleged in the Application, which shall state the official language in which the respondent or intervenor wishes to be heard. Any respondent or intervenor shall, on or before the 1st day of May 1980 serve three (3) copies of his reply or submission and supporting information, particulars or documents

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upon the Applicant and one (1) copy each upon the Attorneys General of the Provinces of Alberta, Saskatchewan, Manitoba, Ontario and Quebec, the Canadian Gas Association, the Canadian Petroleum Association and the Independent Petroleum Association of Canada, and shall file proof of service thereof with the Board at the opening of the Hearing.

5. The Applicant shall prepare its direct evidence written in question and answer form with lines numbered (hereinafter called "written direct evidence") for each of its witnesses and shall,

(a) on or before the 1st day of May, 1980 file thirty (30) copies thereof with the Board and serve one copy of the same upon each person specified in Appendix I to this Order, and

(b) as soon as possible, serve one copy of the same upon any other party who has intervened pursuant to paragraph 4 of this Order.

6. Any party who has intervened pursuant to paragraph 4 hereof and who wishes to present direct evidence in the Hearing, shall prepare written direct evidence, and shall, on or before the 20th day of May, 1980 file thirty (30) copies thereof with the Board and serve one (1) copy of the same upon the Applicant and each other party who has intervened pursuant to paragraph 4 hereof, a list of which intervenors will be available from the Board on the 6th day of May, 1980.

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7. The Rules and Procedures set out in Appendix II to this Order shall govern the conduct of the Hearing.

8. Any interested party may examine a copy of the application and the submissions filed therewith at the office of:

National Energy Board
Trebla Building
473 Albert Street
Ottawa, Ontario
K1A 0E5

or at the offices of the Applicant at the following addresses:

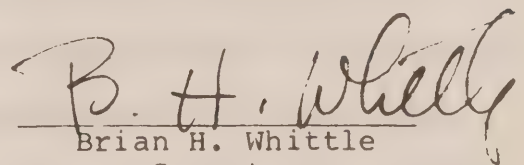
TransCanada PipeLines Limited
Commerce Court West
Toronto, Ontario
M5L 1C2

or

407-8th Avenue South West
Calgary, Alberta
T2P 2M7

DATED at the City of Ottawa, in the Province of
Ontario, this 27th day of March 1980.

NATIONAL ENERGY BOARD



Brian H. Whittle
Secretary

NOTICE OF HEARING

TAKE NOTICE THAT TransCanada PipeLines Limited, hereinafter called "the Applicant" has filed an application dated 7 March 1980, (hereinafter referred to as "the Application") firstly, under sections 50 and 53 of the National Energy Board Act, for orders fixing the just and reasonable rates or tolls the Applicant may charge for or in respect of gas sold by the Applicant in Canada, for transportation services currently rendered to Saskatchewan Power Corporation, Consolidated Natural Gas Limited and Gaz Métropolitain, inc., and for transportation services to be rendered to Consolidated Natural Gas Limited, ProGas Limited and Sulpetro Limited, and disallowing any existing tariffs or rates or tolls or portions thereof that are inconsistent with the just and reasonable rates or tolls so fixed, and, secondly, under section 53 of the Petroleum Administration Act for certain orders approving the price to be paid by the Applicant to acquire gas for removal from the Province of Alberta and revoking any previous orders inconsistent therewith, all effective the 1st day of August 1980.

THE BOARD HAS ORDERED THAT:

1. That portion of the application made under Sections 50 and 53 of the National Energy Board Act will be heard at a public hearing commencing at 9:30 a.m. local time, on Tuesday, 27 May 1980, in the Hearing Room of the National Energy Board, Room 940, Trebla Building, 473 Albert Street, in the City of Ottawa, in the Province of Ontario. Such proceedings will be conducted in

either of the two official languages and simultaneous interpretation will be provided should a party to the proceedings request such facilities in his intervention.

2. Any person intending to oppose or intervene in the said Application, shall, on or before the 1st day of May 1980 file with the Secretary of the Board thirty (30) copies of a written statement containing his reply or submission, together with any supporting information, particulars or documents, which shall include a concise statement of the facts from which the nature of the respondent's or intervenor's interest in the proceedings may be determined, which may admit or deny any or all of the facts alleged in the application, which shall be endorsed with the name and address of the respondent or intervenor or his solicitor to whom communications may be sent, and which shall state the official language in which the respondent or intervenor wishes to be heard. Any respondent or intervenor shall, on or before the 1st day of May 1980 serve three (3) copies of his reply or submission and supporting information, particulars or documents upon the Applicant and one (1) copy each upon the Attorneys General of the Provinces of Alberta, Saskatchewan, Manitoba, Ontario and Quebec, and the Canadian Gas Association, the Canadian Petroleum Association and the Independent Petroleum Association of Canada and shall file proof of service thereof with the Board at the opening of the Hearing.

3. Any party who has intervened pursuant to paragraph 2 hereof and who wishes to present direct evidence, shall prepare

written direct evidence, and shall, on or before 20 May 1980 file thirty (30) copies thereof with the Board and serve one (1) copy of the same upon the Applicant and each of the parties who has intervened pursuant to paragraph 2 hereof, a list of which will be available from the Board on 6 May 1980.

4. Any interested party may examine a copy of the application and the submissions filed therewith at the office of:

National Energy Board
Trebla Building
473 Albert Street
Ottawa, Ontario
K1A OE5

or at the offices of the Applicant at the following addresses:

TransCanada PipeLines Limited
Commerce Court West
Toronto, Ontario
M5L 1C2

407-8th Avenue South West
Calgary, Alberta
T2P 2M7

DATED at the City of Ottawa, in the Province of Ontario,
this 27th day of March 1980.

NATIONAL ENERGY BOARD

Brian H. Whittle,
Secretary.

APPENDIX I to
Order No. RH-2-80

The Honorable Neil Crawford
Attorney General
227 Legislative Building
Edmonton, Alberta
T5K 2B6

The Honorable Roy J. Romanow, Q.C.
Attorney General
Department of the Attorney General
Legislative Building
Regina, Saskatchewan
S4S 0B3

The Honorable Gerald W.J. Mercier, Q.C.
Attorney General
104 Legislative Buildings
Winnipeg, Manitoba
R3C 0V8

The Honorable Roy McMurtry, Q.C.
Attorney General
Ministry of the Attorney General
18 King Street East
Toronto, Ontario
M5C 1C5

The Honorable Marc Andre Bedard
Minister
Department of Justice
225 Grande Allee, Quebec
G1R 4C6

Canadian Gas Association
55 Scarsdale Road
Don Mills, Ontario
M3B 3R3

Canadian Petroleum Association
633 - 6th Avenue S.W.
Suite 1500
Calgary, Alberta
T2P 2Y5

Independent Petroleum Association
of Canada
1610, 715 - Fifth Avenue S.W.
Calgary, Alberta
T2P 2X6

Mr. G. Douglas Nichols
Consolidated Natural Gas Limited
1300 Elveden House
717 - 7th Avenue S.W.
Calgary, Alberta T2P 0Z3

Mr. Ronald S. Loughheed
Senior Vice-President Gas Supply
The Consumers' Gas Company
1 First Canadian Place
Suite 4200
P.O. Box 90
Toronto, Ontario M5X 1C5

Me. Francoise Bureau
Gaz Metropolitain, inc.
1155 Dorchester Boulevard West
Suite 3201
Montreal, Quebec H3B 3S7

Mr. P.O. Petursson
Vice-President - Planning & Gas Supply
Greater Winnipeg Gas Company
265 Notre Dame Avenue
Winnipeg, Manitoba R3B 1N9

Mr. E.P. Rimmer
Inter-City Gas Limited
1700 - 444 St. Mary Avenue
Winnipeg, Manitoba R3C 3T7

Mr. K. Fee
Kingston Public Utilities
Commission
P.O. Box 790
Kingston, Ontario K7L 4X7

Mr. Peter F. Scully
Northern and Central Gas
Corporation Limited
245 Yorkland Boulevard
Willowdale, Ontario M2J 1R1

Mr. D.D. Fearn
Vice-President
Plains-Western Gas (Manitoba) Ltd.
1610 Rosser Avenue
P.O. Box 219
Brandon, Manitoba R7A 5Z1

Mrs. K.D. Wellman
Corporate Legal Counsel and Secretary
Saskatchewan Power Corporation
2025 Victoria Avenue
Regina, Saskatchewan S4P 0S1

Mr. J.B. Jolley, Q.C.
Union Gas Limited
50 Keil Drive North
Chatham, Ontario N7M 5M1

Mr. John M. Rady
Senior Vice President,
General Counsel and Secretary
Great Lakes Gas Transmission Company
2100 Buhl Building
Detroit, Michigan 48226
U.S.A.

Mr. W. Arthur Batten
Vice-President
Michigan Wisconsin Pipe Line Company
One Woodward Avenue
Detroit, Michigan 48226
U.S.A.

Mr. J.M. Robertson
Midwestern Gas Transmission Company
P.O. Box 2511
1100 Milan Building
Houston, Texas 77001
U.S.A.

Mr. R.S. Loughheed
Vice-President and General Manager
Niagara Gas Transmission Company
1 First Canadian Place, Suite 4200
P.O. Box 90
Toronto, Ontario M5X 1C5

Mr. L.J. Gaissert
Vermont Gas Systems Inc.
31 Swift Street
South Burlington, Vermont 05401
U.S.A.

Mr. J.B. Ballem, Q.C.
Ballem, McDill & MacInnes
3600 Scotia Centre
700 Second Street S.W.
Calgary, Alberta T2P 2W2

Mr. W.S. Chan
Coordinator, Natural Gas
Regulatory Affairs
Canadian Superior Oil Limited
Three Calgary Place
355 4th Avenue S.W.
Calgary, Alberta T2P 0J3

Mr. Jerry H. Farrell
Messrs. Smith, Lyons, Torrance,
Stevenson & Mayer
Suite 3800, P.O. Box 38
Toronto-Dominion Bank Tower
Toronto-Dominion Centre
Toronto, Ontario M5K 1C7

Mr. Hugh A. Fergusson
Solicitor
Dow Chemical of Canada, Limited
P.O. Box 1012
Sarnia, Ontario N7T 7K7

Mr. Michael M. Peterson
Curtois, Clarkson, Parsons & Tetrault
630 Dorchester Boulevard West
22nd Floor
Montreal, Quebec

Mr. A. Lorne Campbell, Q.C.
MacAulay & Thorvaldson
3rd Floor, 333 Broadway Ave.
Winnipeg, Manitoba R3C 0T1

Dr. A.W. Birnie
Executive Secretary
Industrial Gas Users Association
206 Laurier Avenue West, 2nd Floor
Ottawa, Ontario K1P 5J8

Messrs. Scott & Ayles
170 Laurier Avenue West
Ottawa, Ontario K1P 5V5

Mr. E.G. Sheasby
Vice-President, General Counsel
and Secretary
Interprovincial Pipe Line Limited
Box 48, 1 First Canadian Place
Toronto, Ontario M5X 1A9

Me. Daniele Houde
Ministere des Richesses Naturelles
Direction generale de l'Energie
1305, Chemin Ste-Foy
Quebec, Quebec G1S 4N5

Mr. R.P. Smith
Counsel
Ministry of Energy
56 Wellesley Street West
12th Floor
Toronto, Ontario M7A 2B7

Mr. George V. Kenda
Corporate Planner
Norcen Energy Resources Limited
4600 Toronto-Dominion Centre
Toronto, Ontario M5K 1E5

Mr. S.G. Trueman
Corporate Counsel
Pan-Alberta Gas Ltd.
350 Bow Valley Square I
202-6th Avenue S.W.
Calgary, Alberta T2P 2R9

Mr. E.C. Eddy
The Alberta Gas Trunk Line Company Limited
Bow Valley Square II, 34th Floor
205-5th Avenue S.W.
Calgary, Alberta T2P 2W4

Mr. John Hopwood, Q.C.
Messrs. Howard, Dixon, Mackie, Forsyth
Barristers and Solicitors
300, 330 - 5th Avenue S.W.
Calgary, Alberta T2P 0L4

RULES AND PROCEDURES

1. In these Rules, "party" means TransCanada PipeLines Limited and any respondent or intervenor who has filed with the Secretary of the Board a written statement pursuant to paragraph 4 of Order No. RH-2-80.
2. At the public hearing of the application by TransCanada PipeLines Limited, the evidence shall be heard in the following order:
 - (1) Rate base and Cost of Service excluding return;
 - (2) Rate of Return; and
 - (3) Rate Design and Other Tariff matters.
3. The Board shall hear all of the evidence on each of the three items referred to in paragraph 2 of these Rules, item by item, and for that purpose the Board shall first hear all of the evidence of the Applicant in respect of one item and then shall hear the evidence of each of the intervenors in respect of the same item.
4. Upon the completion of the evidence on all three items referred to in paragraph 2 of these Rules, the Board shall hear the oral argument of all parties.
5. Any party who wishes to obtain additional information from another party in respect of matters raised in filings made with the Board, may request in writing that such information be provided, and the party to whom the request is made shall, as soon as possible, either provide a written response to the request or refer the question to the Board under Paragraph 7 hereof. Wherever possible, in order to expedite the Hearing,

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such requests and responses should be made before the commencement of the Hearing, and copies shall be filed with the Secretary of the Board.

6. Both the written requests and the responses thereto, referred to in paragraph 5 of these Rules, shall be filed as exhibits at the hearing.

7. If any question arises upon which a decision of the Board may be required, a notice of motion with respect thereto shall be filed with the Secretary of the Board, and the motion shall be heard by the Board at the Hearing on a date to be fixed by it.

8. The order of appearances of parties and sequence of adducing evidence and conducting cross-examination will be announced by the Board on or before the opening of the hearing.

NATIONAL ENERGY BOARD



OFFICE NATIONAL DE L'ÉNERGIE

ORDER NO. TG-4-80

IN THE MATTER OF the National Energy Board
Act and the Regulations made thereunder;
and

IN THE MATTER OF an application by TransCanada
PipeLines Limited (hereinafter called "the
Applicant") for certain orders respecting
tariffs and rates or tolls pursuant to sections
50 and 53 of the National Energy Board Act,
filed with the Board under File No. 1562-T1-13.

BEFORE:

L.M. Thur,)	
Associate Vice-Chairman)	
)	on Monday , the 18th day
J.R. Jenkins,)	
Member)	of August, 1980.
)	
J.R. Hardie,)	
Member)	

UPON an application by the Applicant dated the 7th
day of March, 1980, as amended, inter alia, for orders under
sections 50 and 53 of the National Energy Board fixing the just
and reasonable rates or tolls the Applicant may charge for or
in respect of gas sold by the Applicant in Canada and for
transportation services to Saskatchewan Power Corporation,
Consolidated Natural Gas Limited and Gaz Métropolitain, inc.,
and disallowing any tariffs or rates or tolls or portion
thereof that are inconsistent with the just and reasonable
rates or tolls so fixed, effective the 1st day of August, 1980;

AND UPON the Board having heard the evidence and submissions relating to the said application at a public hearing which commenced on the 27th day of May, 1980;

IT IS ORDERED THAT:

1. The Applicant shall charge, in respect of gas sold by it in Canada and in respect of its T-Service and Transportation Service, the rates and tolls specified in Schedule A hereto.

2. The Applicant shall amend subsection 2 of Section VIII of the General Terms and Conditions of its Tariff by deleting the reference to "arbitration decision."

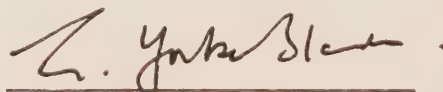
AND IT IS FURTHER ORDERED THAT:

3. The Applicant shall forthwith file with the Board, and serve upon all parties to the hearing of this application new tariffs, tolls and rates conforming with this Order.

4. Notwithstanding the filing of the said new tariffs, tolls and rates, the same shall remain suspended and be of no effect until the 1st day of September, 1980.

5. Those provisions of the Applicant's tariffs, tolls and rates, or any portion thereof, that are contrary to any order of the Board, including this Order, be and the same are hereby disallowed, such disallowance to be effective on the 31st day of August, 1980.

NATIONAL ENERGY BOARD



G. Yorke Slader
Secretary

SCHEDULE ATRANSCANADA PIPELINES LIMITEDRATES AND TOLLS FOR CANADIAN SALES, TRANSPORTATION & T-SERVICEEFFECTIVE: 1 SEPTEMBER 1980

<u>Particulars</u>	<u>Rate Schedule</u>	<u>Transportation Demand Rate (\$/103m³/mo.)</u>	<u>Transportation Commodity Rate (\$/103m³)</u>	<u>Imputed Alberta Border Price (¢/GJ)</u>
<u>Sales Service</u>				
Saskatchewan Zone	CD	53.63	.726	179.408
	AOI	--	2.485	179.408
	SGS	--	5.135	179.408
	PS	--	70.530	179.408
	TWS	--	25.350	179.408
Manitoba Zone	CD	158.42	2.158	179.408
	AOI	--	6.027	179.408
	PS	--	70.530	179.408
	TWS	--	25.350	179.408
Western Zone	CD	257.29	3.505	179.408
	AOI	--	9.389	179.408
	PS	--	70.530	179.408
	TWS	--	25.350	179.408
Northern Zone	CD	400.52	5.461	179.408
	AOI-NDA*	--	14.094	179.408
	AOI-SSMDA**	--	20.418	179.408
	PS	--	70.530	179.408
	TWS	--	30.640	179.408
Eastern Zone	CD	504.55	6.988	179.408
	AOI	--	15.667	179.408
	ACQ	--	20.776	179.408
	PS	--	98.770	179.408
	TWS	--	32.410	179.408
<u>T-Service</u>				
<u>Gaz Metropolitain, inc.</u>		504.55	2.332	
(Fuel Ratio 0.0693)				
<u>Transportation Service</u>				
<u>Saskatchewan Power Corporation</u>				
Bayhurst & Liebenthal		68.61	.934	
Success		51.71	.703	
Empress		74.68	1.014	
Herbert		15.13	.220	
<u>Consolidated Natural Gas</u>		144.75	1.977	

* Northern Delivery Area

** Sault Ste Marie Delivery Area.

ORDER NO. TG-5-80

IN THE MATTER OF the National Energy Board
Act and the Regulations made thereunder;
and

IN THE MATTER OF an application by
TransCanada PipeLines Limited (hereinafter
called "the Applicant") for certain orders
respecting tariffs and rates or tolls
pursuant to sections 50 and 53 of the National
Energy Board Act, filed with the Board under
File No. 1562-T1-13.

BEFORE:

L.M. Thur,)	
Associate Vice-Chairman)	
)	on Monday , the 18th day
J.R. Jenkins,)	
Member)	of August, 1980.
)	
J.R. Hardie,)	
Member)	

UPON an application by the Applicant dated the 7th
day of March, 1980, as amended, inter alia, for orders under
sections 50 and 53 of the National Energy Board Act fixing the
just and reasonable rates or tolls the Applicant may charge for
or in respect of gas sold by the Applicant in Canada and for
transportation services to Saskatchewan Power Corporation,
Consolidated Natural Gas Limited and Gaz Métropolitain, inc.,
and disallowing any tariffs or rates or tolls or portion
thereof that are inconsistent with the just and reasonable
rates or tolls so fixed, effective the 1st day of August, 1980;

- 2 -

AND UPON the Applicant having, in the said application, requested that the Board, by order, for accounting and rate-making purposes:

- (a) "permit the Applicant to modify its rate design for sales of natural gas in Canada to hold constant the present differentials in the CD rates at 100 percent load factor between its various rate zones;
- (b) requiring the adoption by the Applicant of the proposed accounting procedure whereby the increases in federal income taxes caused by the federal surtax for the level of income taxes presently being recovered in its rates with respect to the period of January 1, 1980, to July 31, 1980, will be segregated and recorded by the Applicant, such balance to be amortized monthly in the test year cost of service;
- (c) requiring the adoption by the Applicant of the proposed accounting procedure whereby variances in the cost for the actual volumes of lost and unaccounted for gas from those reflected in rates will be segregated and recovered by the Applicant, with carrying charges, such balance to be amortized from

time to time through adjustments in future rates;

- (d) permitting the deferral of storage costs with carrying charges with respect to inventories of gas owned by the Applicant in underground storage outside the Province of Alberta to be amortized from time to time through adjustments in future rates;
- (e) . permit the Applicant to cost new exports by Consolidated Natural Gas Limited, ProGas Limited, and Sulpetro Limited, pursuant to Licence Nos. GL-61, GL-56, and GL-57, respectively, on an incremental basis, with such costs to be recovered pursuant to the appropriate pricing orders under the Petroleum Administration Act; and
- (f) approve, in principle, the use of the Board's expedited proceedings regulation to establish new rates for the remainder of the test period if all necessary approvals for new exports and related facilities are received on or before the 1st day of November, 1980;

AND UPON having heard the evidence and submissions relating to the said application at a hearing which commenced on the 27th day of May, 1980;

AND UPON the Board having ordered, by Order No. TG-4-80, dated the 18th day of August, 1980, the Applicant to file, in respect of gas sold by it in Canada and in respect of its T-Service and transportation service, new tariffs, tolls, and rates conforming therewith, to be effective on the 1st day of September, 1980;

IT IS ORDERED THAT:

1. The Applicant's request for an order permitting it to modify its rate design for sales of natural gas in Canada to hold constant the present differentials in the CD rates at 100 percent load factor between its various rate zones, be and the same is hereby dismissed.
2. The Applicant's request for an order requiring the adoption by the Applicant of the proposed accounting procedure whereby the increases in the federal income taxes caused by the federal surtax for the level of income taxes presently being recovered in its rates with respect to the period of January 1, 1980, to July 31, 1980, will be segregated and recorded by the Applicant, such balance to be amortized monthly in the test year cost of service, be and the same is hereby dismissed.
3. The Applicant's request for an order requiring the adoption by the Applicant of the proposed accounting procedure whereby variances in the cost for the actual volumes of lost

and unaccounted for gas from those reflected in rates will be segregated and recovered by the Applicant, with carrying charges, such balance to be amortized from time to time through adjustments in future rates, be and the same is hereby dismissed.

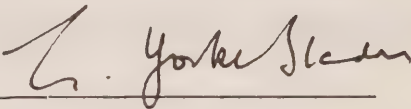
4. The Applicant's request for an order permitting the deferral of storage costs with carrying charges with respect to inventories of gas owned by the Applicant in underground storage outside of the Province of Alberta to be amortized from time to time through adjustments in future rates, be and the same is hereby dismissed.

5. The Applicant's request for an order permitting the Applicant to cost new exports by Consolidated Natural Gas Limited, ProGas Limited, and Sulpetro Limited, pursuant to Licence Nos. GL-61, GL-56, and GL-57, respectively, on an incremental basis, with such costs to be recovered pursuant to the appropriate pricing orders under the Petroleum Administration Act, be and the same is hereby dismissed.

6. The Applicant's request for approval, in principle, of the use of the Board's expedited proceedings regulation to establish new rates for the remainder of the test period if all necessary approvals for new exports and related facilities

are received on or before the 1st day of November, 1980, be
and the same is hereby dismissed.

NATIONAL ENERGY BOARD

A handwritten signature in dark ink, appearing to read "G. Yorke Slader", written over a horizontal line.

G. Yorke Slader
Secretary

TRANSCANADA PIPELINES LIMITED

Comparison of Components of Rate of Return
Previously Authorized, Applied For and Approved

	Previously Authorized			Applied For			Authorized in This Decision		
	Capital Structure	Cost Rate	Cost Component	Capital Structure	Cost Rate	Cost Component	Capital Structure	Cost Rate	Cost Component
	%	%	%	%	%	%	%	%	%
Funded Debt	50.09	8.72	4.37	46.03	8.43	3.88	46.46	8.43	3.92
Unfunded Debt	<u>2.97</u>	11.50	<u>.34</u>	<u>15.59</u>	13.00	<u>2.03</u>	<u>17.64</u>	12.75	<u>2.25</u>
Total Debt Capital	53.06	8.88	4.71	61.62	9.59	5.91	64.10	9.62	6.17
Preferred Share Capital	5.91	7.61	.45	5.84	7.36	.43	5.90	7.36	.43
Common Equity	<u>41.03</u>	14.00	<u>5.74</u>	<u>32.54</u>	16.00	<u>5.21</u>	<u>30.00</u>	15.00	<u>4.50</u>
	<u>100.00</u>			<u>100.00</u>			<u>100.00</u>		
Overall Rate of Return			<u>10.90</u>			<u>11.55</u>			<u>11.10</u>

WEIGHTED AVERAGE COST OF FUNDED DEBT CAPITAL
FOR THE TEST YEAR ENDING 31 JULY 1981

	<u>AVERAGE PRINCIPAL OUTSTANDING (\$000)</u>	<u>FINANCIAL CHARGES (\$000)</u>	<u>COST RATE</u>
<u>FIRST MORTGAGE PIPE LINE BONDS</u>			
5-3/4% due 1983 (U.S.)	15 070	867	
6-1/4% due 1983	7 250	453	
5-1/8% due 1985 (U.S.)	10 966	562	
6-5/8% due 1987 (U.S.)	48 148	3 190	
8-3/4% Series A due 1992	65 467	5 728	
8-3/4% Series B due 1992	26 991	2 362	
8-3/8% Series A due 1993	45 587	3 818	
8-3/8% Series B due 1993	7 222	605	
	<u>226 701</u>	<u>17 585</u>	7.76%
<u>SINKING FUND DEBENTURES</u>			
10% Series A due 1990	37 153	3 715	
9-3/4% Series B due 1990	45 600	4 446	
9% Series C due 1991	38 427	3 458	
8-7/8% Series D due 1992	79 983	7 098	
9% Series E due 1993	82 508	7 426	
11-1/2% Series F due 1995	47 073	5 413	
9.60% Series G due 1997	69 750	6 696	
	<u>400 494</u>	<u>38 252</u>	9.55%
<u>BANK LOANS</u>			
due 1981	5 385	727	13.50%
<u>SUBORDINATED DEBENTURES</u>			
5.85% due 1987	32 430	1 867	
5.60% due 1987 (U.S.)	12 430	696	
	<u>44 860</u>	<u>2 563</u>	5.71%
	677 440	59 127	
Amortization of Debt Discount and Expense		1 446	
Gain on Sinking Fund Redemptions		(5 258)	
Foreign Exchange on Interest Expense		797	
Foreign Exchange on Redemptions		1 028	
FUNDED DEBT	<u>677 440</u>	<u>57 140</u>	8.43%

TRANSCANADA PIPELINES LIMITED

Functional Distribution and Classification of Authorized Cost of Service

	<u>Total</u>	<u>Cost of Gas</u>	<u>Miscellaneous Transmission</u>	<u>Metering</u>	<u>Transmission</u>		
					<u>Fixed</u>	<u>Variable (Fuel)</u>	<u>Variable (Other)</u>
Cost of Gas Sold	\$2 060 064 755	\$2 060 064 755					
Transmission by Others	126 436 969		\$106 699		\$ 53 062 930	\$ 28 529 403	\$44 737 937
Operation and Maintenance	165 782 495			\$2 951 282	66 262 919	81 926 105	11 832 218
Depreciation	56 859 153			705 155	56 153 998		\$2 809 971
Taxes Other Than Income	16 743 871			69 719	16 674 152		
Miscellaneous Deferred Items	603 933				603 933		
Income Taxes	66 555 219			826 283	65 728 936		
Other Operating Income	(4 287 799)				(112 560)		(4 175 239)
Return @ 11.1%	155 628 721			1 923 734	153 704 987		
Total Cost of Service	\$2 644 387 317	\$2 060 064 755	\$106 699	\$6 476 173	\$412 079 295	\$110 455 508	\$52 394 916
Miscellaneous Revenue	(9 243 306)	(3 482 212)	(2 589)	(140 144)	(4 296 586)	(957 063)	(364 712)
NET COST OF SERVICE	\$2 635 144 011	\$2 056 582 543	\$104 110	\$6 336 029	\$407 782 709	\$109 498 445	\$52 030 204
							\$2 809 971

DERIVATION OF THE IMPUTED ALBERTA BORDER PRICE

1. Average Transportation Charge from the Alberta Border to the Eastern Zone in ¢/GJ

Transportation Rates for CD Service

Transportation Commodity Rate	\$ 6.988/10 ³ m ³
Transportation Demand Rate	\$504.55/10 ³ m ³ /month
Average Transportation Charge per GJ for 37.47 MJ/m ³ Gas Taken at 100% Load Factor	
Average Transportation Charge (1)	62.920 ¢/GJ

2. Derivation of the Imputed Alberta Border Price Effective 1 September 1980

Toronto Reference Price (2)	242.328 ¢/GJ
Less: Average Transportation Charge - Alberta Border to Eastern Zone	<u>(62.920) ¢/GJ</u>
Imputed Alberta Border Price	<u>179.408 ¢/GJ</u>

$$(1) \quad \frac{504.55 \times 100 \times 12}{365 \times 37.47} + \frac{6.988 \times 100}{37.47} = 62.920 \text{ ¢/GJ}$$

- (2) Toronto reference price of \$2.60 per MMBTU announced by the Province of Alberta on 31 July 1980 and subsequently accepted by the Federal Government.

